IP Camera Overview

FINE IP PTZ / Dome Camera

Model	EP-Q2036HW-IP EP-Q2026HW-IP EP-Q2018HW-IP	SP-PTIR737	CDV-3VM301	CDV-3VM501	CDV-3F930HU	CDV-3V930HU	CDV3V930 HDNU	CDV3VWD 960
Image Sensor	1/4" SONY Exview CCD	1/4" Exview HAD CCD	1/4" OV Progressive Scan CMOS	1/3" Micron Progressive Scan CMOS	1/3" SONY SuperHAD CCD	1/3" SONY SuperHAD CCD	1/3" SONY SuperHAD CCD	1/3" CCD (Wide Dynamic Range)
Lens	36X Optical Zoom 26X Optical Zoom 18X Optical Zoom With Wide Dynamic Range	37X Optical Zoom	Varifocal DC Iris 3.7~12 mm lens	Varifocal DC Iris 2.7~9 mm lens	3.6 (standard), 4.3 mm, 6mm, 8mm, 12mm (option)	Varifocal DC Iris 3.7~12 mm lens	Varifocal DC Iris 3.7~12 mm lens	Varifocal DC Iris 3.7~12 mm lens
Day & Night	Yes, with Mechanical IR Cut Filter or Color	Yes , with Mechanical IR Cut Filter	Yes, with Mechanical IR Cut Filter or color	Yes, with Mechanical IR Cut Filter or color	Software day & night or color	Software day & night or color	Yes, with Mechanical IR Cut Filter	Yes , with Mechanical IR Cut Filter
IR LEDS	N/A	Yes	Yes	Yes	N/A	N/A	Yes	Yes
Minimum Illumination	Color: 0.1 Lux B/W: 0.01 Lux	0.1 Lux /1 / 3 Sec. 1.4 Lux /1/50 Sec	Color: 1.5 Lux B/W: 0. Lux	Color: 0.5 Lux B/W: 0 Lux	Color: 0.1 Lux	Color: 0.1 Lux	Color: 0.1 Lux	Color: 0.1 Lux B/W: 0 Lux
Video Compression	H.264/JPEG Triple Streaming	H.264/JPEG/MPEG4 Triple Streaming	MPEG4/MJPEG Dual Streaming	H.264	MPEG4/MJPEG Dual Streaming	MPEG4/MJPEG Dual Streaming	MPEG4/MJPEG Dual Streaming	H.264/JPEG/MPEG4 Triple Streaming
Max. Video Resolution/fps	720x480 at 30 fps	720x480 at 30 fps	1280x1024 at 10 fps	1600x1200 at 15 fps	720x480 at 30 fps	720x480 at 30 fps	720x480 at 30 fps	720x480 at 30 fps
Network	Wired	Wired	Wired	Wired	Wired	Wired	Wired	Wired
Audio in	External	External	External	External	External	External	External	External
N-Way Audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio
Alarm In/Out	N/A	N/A	1/1	1/1	1/1	1/1	1/1	1/1
3GPP Mobile/ Smart Phone	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Free Bundled Software 36 Channel	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Maxi Watch Professional Software	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power	AC24V	AC24V	DC12V & POE (IEE802.3af)	DC12V & POE (IEE802.3af)	DC12V or POE (IEE802.3af)	DC12V or POE (IEE802.3af)	DC12V or POE (IEE802.3af)	DC12V & POE (IEE802.3af)

IP Camera Overview

				FINE Network Camera				
Model	TCP-MH802 TCP-MH802DN	TCP-690DNU	TCP-HPC960U TCP-HPC960WIU TCP-HPDN960U TCP-HPDN960WIU	TCP-IPWD 700DN	TCP-VM201	TCP-VM501	TCP-IRV540P/N
Image Sensor	1/3" Micron CMOS	1/3" SONY SuperHad CCD	1/3" Hi-Sensitivity CCD	1/3" Sharp CCD (Wide Dynamic Range)	1/4" OV Progressive Scan CMOS	1/3" Micron Progressive Scan CMOS	1/3" SONY CCD
Day & Night	Color; Yes,with for TCP-MH802	Yes, with Mechan ical IR Cut Filter or color	Yes, with Mechanical IR Cut Filter or color	Yes , with Mechanical IR Cut Filter	Yes, with Mechanical IR Cut Filter	Yes, with Mechanical IR Cut Filter	Yes, with Mechanical IR Cut Filter
IR LEDS	N/A	N/A	N/A	N/A	Yes	Yes	Yes
Minimum Illumination	Color: 0.5 Lux	Color: 0.1 Lux B/W: 0.05 Lux	Color: 0.1 Lux B/W: 0.1 Lux	Color : 3 Lux B/W : 0.00001 Lux	Color: 1.5 Lux B/W: 0 Lux (IR LED ON)	Color: 0.5 Lux B/W: 0 Lux (IR LED ON)	Color: 0.1 Lux B/W: 0 Lux (IR LED ON)
Video Compression	H.264/JPEG Triple Streaming	MPEG4/MJPEG Dual Streaming	H.264/JPEG Triple Streaming	H.264/JPEG Triple Streaming	MPEG4/MJPEG Dual Streaming	H.264/JPEG Triple Streaming	MPEG4/MJPEG Dual Streaming
Max. Video Resolution/fps	1600x1200 at 15 fps	720x480 at 30 fps	720x480 at 30 fps	720x480 at 30 fps	1280x1024 at 10 fps	1600x1200 at 15 fps	720x480 at 30 fps
Network	Wired	Wired or Wireless	Wired or Wireless	Wired or Wireless	Wired	Wired	Wired
Audio in	Built in Microphone	Built in Microphone	Built in Microphone	Built in Microphone 2 way audio	N/A	External	N/A
N-Way Audio	2 way audio	2 way audio	2 way audio	2 way audio	N/A	2 way audio	N/A
Alarm In/Out	1/1	2/2	2/2	1/1	N/A	1/1	N/A
3GPP Mobile/ Smart Phone	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Free Bundled Software 36 Channel	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Maxi Watch Professional Software	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power	DC12V & POE (IEE802.3af)	DC12V or POE (IEE802.3af)	DC12V or POE (IEE802.3af)	DC12V & POE (IEE802.3af)	DC12V & POE (IEE802.3af)	DC12V & POE (IEE802.3af)	DC12V

IP Camera Overview

FINE Network Camera

Model	TCP-IRWH540P/N	TCP-IR590-WD30 TCP-IR590-WD50	TCP-IRH5030 TCP-IRH5040	TCP-IRV560/30M TCP-IIRV560/40M TCP-IRV560/50M	TCMA-99	TCMA-99W
Image Sensor	1/3" CCD (Wide Dynamic Range)	1/3" CCD (Wide Dynamic Range)	1/3" CMOS Sensor	1/3" SONY CCD	1/4" OV Progressive Scan CMOS	1/4" OV Progressive Scan CMOS
Day & Night	Yes , with Mechanical IR Cut Filter	Yes , with Mechanical IR Cut Filter	Yes, with automatic switch over	Yes, with automatic switch over	Color	Color
IR LEDS	Yes	Yes	Yes	Yes	N/A	N/A
Minimum Illumination	Color : 3 Lux B/W : 0 Lux	Color : 3 Lux B/W : 0 Lux	Color : 3 Lux B/W : 0 Lux	Color : 3 Lux B/W : 0 Lux	Color: 1.5 Lux	Color: 1.5 Lux
Video Compression	H.264/JPEG Triple Streaming	H.264/JPEG Triple Streaming	H.264/JPEG Triple Streaming	MPEG4/MJPEG Dual Streaming	MPEG4/MJPEG Dual Streaming	MPEG4/MJPEG Dual Streaming
Max. Video Resolution / fps	720x480 at 30 fps	720x480 at 30 fps	1600x1200 at 15 fps	720x480 at 30 fps	1280x1024 at 10 fps	1280x1024 at 10 fps
Network	Wired	Wired	Wired	Wired	Wired	Wireless
Audio in	External	External	External	NA	Built in Microphone	Built in Microphone
N-Way Audio	2 way audio	2 way audio	2 way audio	NA	2 way audio	2 way audio
Alarm In /Out	1/1	1/1	1/1	1/1	1/1	1/1
3GPP Mobile / Smart Phone	Yes	Yes	Yes	Yes	Yes	Yes
Free Bundled Software 36 Channel	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Maxi Watch Professional Software	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes
Power	DC12V	DC12V	DC12V	DC12V	DC12V & POE (IEE802.3af)	DC12V

IP Camera Overview

FINE Network Camera

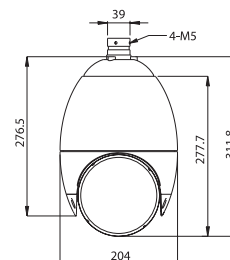| Model	TCMP-99	TCMP-99W	GP-100CB WGP-100-CB	GE-100CB WGE-100-CB	MD-D1200	MD-D1612
Image Sensor	1/4" OV Progressive Scan CMOS	1/4" OV Progressive Scan CMOS	1/4" Megaapixel CMOS Sensor	1/4" Megaapixel CMOS Sensor	1/4" Color CCD	1/4" Color CCD
Day & Night	Color	Color	Manual switch day & night via software	Color	Color	Color
IR LEDS	N/A	N/A	Yes	N/A	N/A	N/A
Minimum Illumination	Color: 1.0 Lux	Color: 1.0 Lux	0 Lux (with LED) 1 Lux (without LED)	1 Lux	1 Lux	1 Lux
Video Compression	MPEG4/MJPEG Dual Streaming	MPEG4/MJPEG Dual Streaming	H.264/JPEG / MPEG4 Triple Streaming	H.264/JPEG / MPEG4 Triple Streaming	MPEG4/MJPEG Dual Streaming	H.264/JPEG Triple Streaming
Max. Video Resolution / fps	640x480 at 30 fps	640x480 at 30 fps	1280x800 at 15 fps	1280x800 at 15 fps	720x480 at 30 fps	720x480 at 30 fps
Network	Wired	Wireless	Wired or Wirelss	Wired or Wirelss	Wired	Wired
Audio in	Built in Microphone	Built in Microphone	Built in Microphone & speaker	Built in Microphone & speaker	Built in Microphone	Built in Microphone
N-Way Audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio	2 way audio
Alarm In /Out	1/1	1/1	1/1	1/1	1/1	1/1
3GPP Mobile / Smart Phone	Yes	Yes	Yes	Yes	Yes	Yes
Free Bundled Software 36 Channel	Yes, support	Yes, support	Yes, support 64 channel free bundled software	Yes, support 64 channel free bundled software	Yes, support	Yes, support
Maxi Watch Professional Software	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support	Yes, support
Motion Detection	Yes	Yes	Yes	Yes	Yes	Yes
Power	DC12V & POE (IEE802.3af)	DC12V	DC12V	DC12V	DC12V or POE (IEE802.3af)	DC12V or POE (IEE802.3af)

IR IP High Speed Dome

● Key Features

- Unique Design, all in one Integrated Hi-Speed Dome
- Integrated with High Quality IR Leds, 100M normal distance, maximum distance 200M with Laser
- Powerful Mechanism Structure with shocking resistance
- 3 Level Lighting Protection
- IP 65 rated housing
- ONVIF compliance

● Mechanical Dimension

● Technical Specifications

Model	SP-PTIR737-IP
Image Sensor	1/4" Exview HAD CCD
Effective Pixels	PAL: 752(H) x 582(V) NTSC: 768(H) x 494(V)
Horizontal Resolution	Color: 550TV Lines B/W: 680 TV Lines
Synchronization	Internal synchronization/power synchronization/external synchronization
Optical Lens	37X Optical Zoom, f=3.5(wide)-129.5mm(tele)
Digital Zoom	12x
Horizontal angle	42.5° to 1.19°
Iris	F 1.7 to 3.9
Illumination	0.1 Lux /1 / 3 Sec. 1.4 Lux /1/50 Sec PAL
Minimum Illumination	0 Lux
Day/Night	Day / Night / Auto
S/N Ratio	More than 50dB
Gain Control	-3 to 28 dB 16 Steps
Shutter	1-1/10000 sec 22 Steps Gain/Shutter adjustable
Video Output	1VP-P 75 ohm negative polarity 2:1 Interlaced
Video System	PAL /NSTAC
Private Zone	8 Zones (According to the module)
Exposure Mode	Auto/Brightness first/Shutter first/Iris first/Manual, Gain/Shutter are adjustabe
Video effect	Art, B/W, Mirror, Frozen, Anti-shaking
White balance	Auto / Manual / Auto tracking
Back light	Open / Closed / Auto
Pan Range	360°Continuous
Tilt Range	186° (-93°- 0° -93°) and 9 0°+ auto rotation can be set
Pan Speed	0.01°/S - 180°/S
Tilt Speed	0.01°/S - 180°/S
Presets Speed	220°/S
Baud rate	1200/2400/4800/9600 bps
Protocol	AD PELCO-D PELCO-P PHILIPS VICON SAMSUNG DS etc.
Communication port	RS485 1200 m
Presets	128 Presets
Touring	8tours,24presets per tour, speed and time can be adjusted separately
Track	2 Tracks,40 seconds per track
Swing	horizontal and vertical rotation, between two presets,4 presets, back and forth, rotate at any speed
Combination motions	2 combinations, presets, touring, track are at any combination, speed,time can be set separately
Timing	Call the presets according to week, touring, track, combination motion, color to B/W,B/W to color,tracing,4 period per day
Stop and Stay	Stay 1-99 minutes, calling presets, tourings, trace, combination motions and timing
Power on	Calling the motions before power off, presets, touring, traces, combination motions, rotation, tracking
Display	Time, date, title, coordinates, temperature, booting info.motion info.
Menu language	Chinese-English menu
Title	One main title,1-16 presets title,8 Chinese or16 English characters
Alarm	4 inputs port, can extend to8 or 16.two group output, one is N.O., one is N C. Contact Capacity is 0.5A/24V
After-alarm recovery	0-99min
Motion detection	Respond to the presets
Glass	Double layer optic glass
Shells	ROHS Aluminium, non-lead powder paint for outdoor, white/steel grey/green are options
IR lights	Automatic tracing/Remote upgrades are options, power is more than 30W, More than 200m effective distance
Module structure	high strength structure of Integrated metal with 4 bearings
Installation	Wall mounting, pendant mounting, various covers, brackets and power case are options
Installation ports	40mm Through hole or G11/2 thread
Ports protection	3 Level surge protection for all the ports, can withstand some high voltage
Power consumption	AC24V±10% / 0.3-2A
Weight	11 kgs (packing included)
Working temperature	-50° centigrade to 50° centigrade
Working humidity	IP65
Network Ethernet	10 / 100 Base–T
Network Protocols	TCP / IP, DHCP, HTTP, DHCP, PPPoE, FTP, RTSP, DDNS, NTP
Image Frame Rate	30/25 fps (NTSC/PAL)
Compression Format	H.264 / JPEG
Video Bit Rate Adjust	CBR, VBR
Motion Detection	Yes, 3 different areas
Triggered Action	Yes, configurable
Simultaneous Connection	Up to 10
Software SDK	Provided upon customer request

▶ Specifications are subjected to change without prior notice.

Eagle Series (Indoor, Outdoor Type)
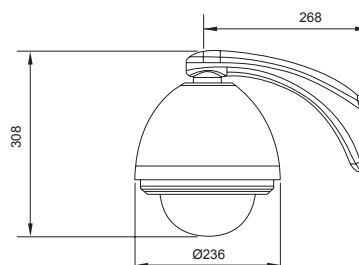# IP Speed Dome WDR, D/N, 540 TVL
H.264

In Ceiling   **Surface Mount**

● Key Features

- H.264/JPEG Streaming Network
- Wide Dynamic Range
- Support 3GPP/PDA Service
- Day Night + ICR, more than 540 TV Lines of Horizontal Resolution
- Quick and easy to install in just a few seconds
- Auto running: allows the dome to return any preset, sequence, pattern, panning automatically after a period of time without getting signal
- 8 programmable zones
- 220 presets with editable time
- 24 privacy zones for EP-Q2036HW-IP, 8 privacy masking EP-Q2026HW-IP for EP-Q2018HW-IP
- Positioning accuracy up to 0.1 degree
- 4 auto scans with 355 degree scan range
- 4 panning with up to 355 degree scan range
- Communication Interface: RS485/RS422

- 4 sequences, each one with 32 presets dwell time can be set
- 4 pattern tours each one with up to 180 seconds of record
- Baud Rate: 2400/4800/9600/19200 bps
- Support multiple protocols: Pelco P/D, VCL, Vicon, Molynx, Diamond, Kalatel, Ernitec, Lilin, Panasonic (Pelco-Coaxitron, Manchester, Bi-Phase)
- Black liner for discreet surveillance
- Built in 1500W lighting proof and surge proof
- Video Output: BNC/UTP
- Support Maxi-Watch Professional IP soft ware (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- IP66 Rated
- ONVIF compliance

● Mechanical Dimension

● Technical Specifications

Model	EP-Q2036HW-IP EP-I2036HW-SM-IP (Surface Mount) EP-I2036HW-CM-IP (In Ceiling)	EP-Q2026HW-IP EP-I2026HW-SM-IP (Surface Mount) EP-I2026HW-CM-IP (In Ceiling)	EP-Q2018HW-IP EP-I2018HW-SM-IP (Surface Mount) EP-I2018HW-CM-IP (In Ceiling)
Image Sensor	1/4" SONY Exview HAD CCD		
TV System	PAL: 752 (H) x 582 (V) ; 2:1 interlace NTSC: 768 (H) x 494 (V) ; 2:1 Interlace		
Horizontal Resolution	More than 540 TV lines		
Synchronization	Internal / External V-lock		Internal / V-lock
Optical Lens	36X Optical Zoom, f=3.4mm(wide) - 122.4mm (tele), F1.6 -4.5	26X Optical Zoom, f=3.5mm(wide) - 91.0mm (tele), F1.6 -3.8	18X Optical Zoom, f=4.1mm(wide) - 73.8mm (tele), F1.4 -3.0
Digital Zoom	12X (up to 432X with optical zoom)	12X (up to 312X with optical zoom)	12X (up to 216X with optical zoom)
Video Output	1.0Vp-p (sync negative)		1.0Vp-p (sync negative), Y/C output
Gain Control	Auto / manual (-3 to 28dB, 16 steps)		
Minimum Illumination	0.1 Lux (Color) 0Lux (B/W)	0.09 Lux (Color) 0 Lux : B/W	0.07 Lux (Color) 0 Lux : B/W
S/N ratio	≥ 50dB	> 50dB	
BLC	On/OFF		
ELC	Auto: 1/50 - 1/10,000 sec. ; Manual : 22 steps		
White Balance	Auto (3000°K-7500°K) ATW (2000°K-10,000°K) Indoor, Outdoor, One-push, Manual		
AE Compensation	Auto, Manual, Backlight compensation, EV compensation, priority mode, Bright, Slow AE	Auto, Manual, Backlight compensation, EV compensation, priority mode, Bright.	
EV Compensation	-10.5 +10.5dB (1.5 dBsteps)		
Focusing System	Auto (sensitivity: normal, low), One-push AF, manual, Infinity, Interval AF, Zoom Trigger AF		
Day Night Function	Yes, with ICR Cut Filter		
Aperture Control	Auto / manual		
Preset	220 positions		
Focus	Auto / manual		
OSD Language	English, Italian, Spanish, German, French, Russian and Portuguese		
Operating Temperature	Indoor: -10°C to + 50°C ('14°F to 122°F) Outdoor: -40°C to + 70°C (-40°F to 158°F)		
Storage Temperature	-20°C to + 60°C (- 4°F to 140°F)		
Power Supply	AC24V, 50/60Hz		
Power Consumption	Indoor 10w, outdoor 50w		
Network — Ethernet	10 / 100 Base–T		
Network — Network Protocols	TCP / IP, DHCP, HTTP, DHCP, PPPoE, FTP, RTSP, DDNS, NTP		
Image Frame Rate	30/25 fps (NTSC/PAL)		
Compression Format	H.264 / JPEG		
Video Bit Rate Adjust	CBR, VBR		
Motion Detection	Yes, 3 different areas		
Triggered Action	Yes, configurable		
Simultaneous Connection	Up to 10		
Software SDK	Provided upon customer request		
Mechanical Specification			
Pan Range	360° continuous		
Tilt Range	90 degrees		
Manual Pan Speed	0.1- 160 degree/ sec.		
Manual Titl Speed	0.1-160 degree/ sec.		
Preset Speeds	Pan: more than 360 degrees, tilt: more than 360 degrees		

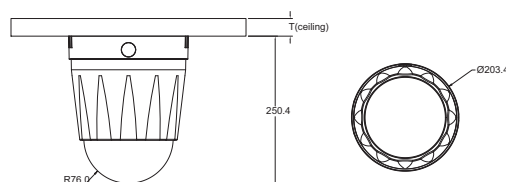▶ Specifications are subjected to change without prior notice.

Accessories For EP Speed Domes

EP-803
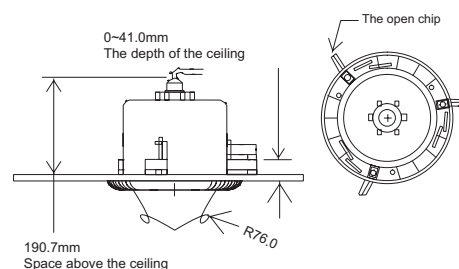
Surface Mount For Indoor Housing Use
- Bubble: (standard) clear cover with black insert
- Vandal proof (option)
- Upper Housing Color: Cool Gray
- Construction: Hard Plastic for the upper housing, acrylic bubble
- Weight (includes PTZ mechanism module): 2.3 kgs

EP-802
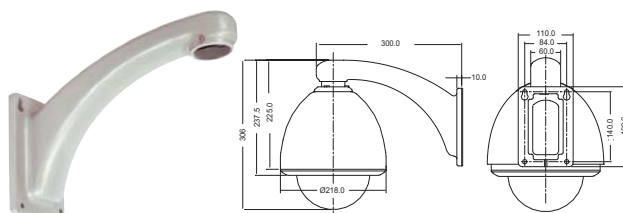
Flush Mount For Indoor Housing Use
- Bubble: standard: clear cover with black inserts
- Vandal proof (option)
- Upper Housing Color: Black
- Construction: Hard Plastic for the upper housing, acrylic bubble
- Weight (includes PTZ mechanism module): 2.5 kgs

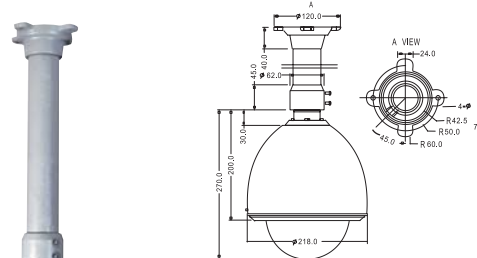### EP-W804

Wall Mount Bracket
- Material: Aluminum
- Dimension: 300mm (L) x 110mm(W) x 160mm (H)
- Weight: 1.2 Kgs

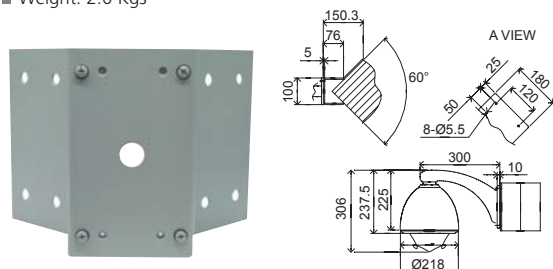### EP-P805

Pendant Mount Bracket
- Material: Aluminum
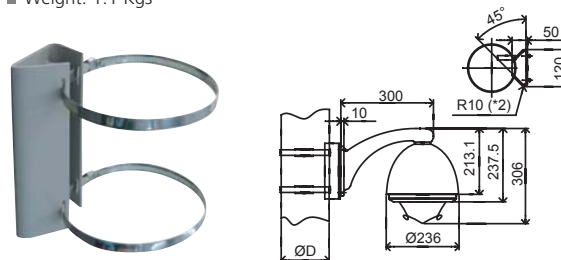- Weight: 1.3 Kgs

EC-01

Corner Mount
- Material: Aluminum
- Weight: 2.0 Kgs

EP-P02

Pole Mount
- Material: Aluminum
- Weight: 1.1 Kgs

NETCD-H (H.264)

Network Card H.264
- Support RS-232
- PTZ control support
- Support PDA, 3GPP Service

AT-100

Auto Tracking Box
- Up to 4 alarm inputs; 2 alarm outputs
- Auto search and track on moving object, with adjustable precision and tracking state
- Auto return to home position/preset and keep tracking after a programmable interval when object is out of adjustable area
- Hi-precision motor providing stable and precise performance
- P/T speed adjustable as per zoom times;
- Protocols supported Pelco D/P with adjustable baud rate;
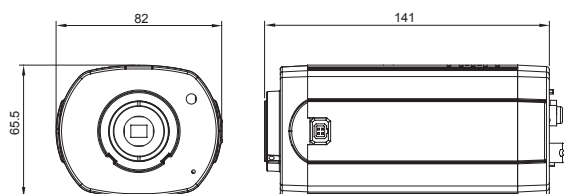- Interface RS485
- Power 9V~12VDC

H.264 Megapixel IP Camera

● Key Features

- 720P @ 30 FPS
- 2.0 Megapixel
- H.264/ MJPEG/MPEG4 compression
- Video motion detection
- Support 2 Way Audio
- Support 3Gpp / PDA service
- Easy set up with UPnP support
- Expansion SD back up for data storage

- SDK for software integration provided
- Free Bundled Basic 36 Channel Recording Software Provided
- Support Maxi-Watch Professional IP software (option)
- Wireless (option)
  TCP-MH802WI
  TCP-MH802DN/WI
- ONVIF compliance

● Mechanical Dimension

82   141

65.5

● Technical Specifications

Model		TCP-MH802	TCP-MH802DN
Image	Device	1/3" Micron Progressive Scan CMOS (2M-Pixel)	
Minimum Illumination	Color	0.5 Lux	0.5 Lux
	B/W	NA	0.00001 Lux
	IR Sensitivity	NA	Yes
Lens	Lens Mount	CS Mount	
Synchronization	Sync. System	Internal	
Day/Night Functions	Mechanical IR Cut Filter	-n/a-	Yes, with automatic switch over
Functions	Video setting	Brightness, Contrast, Sharpness, Night Mode	
	Motion Detection	Yes (3 Windows)	
	Electronic Shutter	Auto	
	Flickerless	1/5 ~1/40.000 sec.	
	BLC	Yes (ON/OFF)	
	AGC	Auto	
	White Balance	Auto	
S/N Ratio		>42dB	
Video Quality	Network Compression	H.264 / M-JPEG / MPEG4	
	Picture Resolution	1600x1200, 1280x1024, 1280x960, 1280x720, 800x600,640x480, 320x240, 176x120	
	Adjustable Bit Rate	VBR, CBR	
	Image Frame Rate	1600x1200@15FPS 1280x1024@22FPS 1280x960@25FPS 1280x720@30FPS	
Video Streaming	Streaming 1	H.264 or MJPEG	
	Streaming 2	H.264 or MJPEG	
	Streaming 3(3GPP)	MPEG4 (3GPP)	
Audio Input	Compression	G.711	
	Audio Line Input	Built-in MicroPhone	
Audio Output	Compression	G.711	
	Audio Line Output	1	
Alarm	Digital Input	1	
	Digital Output	1 (Relay out)	
Reset Button		Yes	
LED		Power and Network LED	
I/O		1 in / 1 Relay out	
RS-485		Yes	
Network	Ethernet Port	Ethernet (10/100 Base-T)	
	Protocol	HTTP, TCP/ IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP	
Software	Web Browser	Microsoft Internet Explorer 6.0 or above	
	SDK	Yes	
	Security	Password Protection: Configured by the Administrator	
Operating	Temperature	0°C ~40°C	
Power	Power Requirement	DC12V & PoE (IEEE 802.3af) with Class 3	
	Power Consumption	450mA, 5.5W	
Physical	Dimensions (W x H x D)	80mm(W) x 65mm(H) x 137mm(D)	
	Weight	450 g	
Certficate		FCC, CE	

▶ Specifications are subjected to change without prior notice.
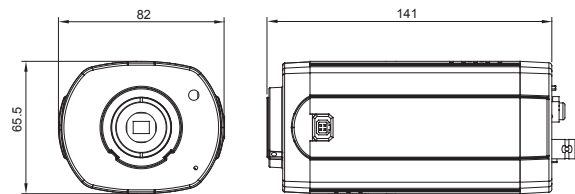
H.264 IP Camera

TCP-HPC960
TCP-HPDN960

TCP-HPC960WI
TCP-HPDN960WI

ONVIF

Key Features

- High definition 540TV Lines with 1/3" Hi-Sensitivity technology
- Supreme day & night function with automatic ICR filter TCP-HPDN960U
- TCP-HPDN960WIU
- Auto IRIS control, auto white balance, back light compensation available
- Triple streaming H.264 / MPEG4 / JPEG compression
- Remote Surveillance through Internet or Intranet
- Event triggered picture can be sent via FTP or E-mail

- PPPoE or DDNS support
- Video motion detection
- Support 3GPP / PDA service
- Easy set up with UPnP support
- Two way audio integration
- Support Maxi-Watch Professional IP software (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- SDK for software integration provided
- ONVIF compliance

Mechanical Dimension

82   141

65.5

Technical Specifications

Model		TCP-HPC960	TCP- HPC960WI	TCP- HPDN960	TCP- HPDN960WI
Image	Device	1/3" Hi-Sensitivity CCD			
	Effective Pixels	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x582(V)
	Horizontal Resolution	560 TVL	560 TVL	560 TVL	560 TVL
Minimum Illumination	Color	0.1 Lux		0.1 Lux	
	B/W	NA		0.1 Lux	
	IR Sensitivity	NA		850nM	
Lens	Lens Mount	CS			
Synchronization	Sync. System	Internal			
Day/Night Functions	Mechanical IR Cut Filter	NA		Yes, with automatic switch over	
Functions	Video Setting	Brightness, Contrast, Saturation, Hue			
	Motion Detection	Yes (3 windows)			
	Electronic Shutter	Auto			
	BLC	Yes (ON/OFF)			
	AGC	Auto			
	White Balance	Auto			
	Auto Iris Control	Auto			
S/N Ratio		>48dB			
Video Quality	Network Compression	H.264			
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)			
	Adjustable Bit Rate	CBR,VBR			
	Image Frame Rate	30/25 fps (NTSC/PAL)			
Audio Input	Compression	ADPCM			
	Audio Line Output	Built-in MicroPhone			
Audio Output	Compression	ADPCM			
	Audio Line Output	1			
Alarm	Alarm Input	2			
	Alarm Output	2			
Reset Button		Yes			
LED		Power LED, Network LED			
Network	Ethernet	Ethernet(10/100Base-T) RJ-45 connector			
	Protocol	TCP/IP, ICMP, HTTP, FTP, SMTP, DDNS, PPPoE			
Software	Web Browser	Microsoft Internet Explorer 6.0 or above			
	SDK	Yes			
	Security	Password protection: configured by the administrator			
Temperature	Operating	-10°C ~ 45°C			
	Storage	-30°C ~ +60°C			
Power	Power Requirement	DC12V or POE (IEEE802.3af)	DC12V	DC12V or POE(IEEE802.3af)	DC12V
	Power Consumption	LAN: 450mA, 5.4W	WLAN: 550mA, 5.4W	LAN: 450mA, 5.4W	WLAN: 550mA, 5.4W
Physical	Dimensions (W x H x D)	80mm(W) x 65mm(H) x 137mm(D)			
	Weight	450 g			
Approvals	Certificate	NA			
Certficate		FCC, CE			

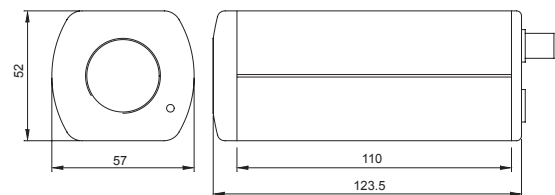▶ Specifications are subjected to change without prior notice.

MPEG4/MJPEG IP Camera

Key Features

- Internal build-in 1/3" CCD
- Remote Surveillance Through Internet or Intranet
- Dual streaming MPEG4 & MJPEG compression
- Event triggered picture can be sent via FTP or E-mail
- System base on Java platform for better stability
- Remote recording
- PPPoE or DDNS support
- Video motion detection
- Support 3GPP / PDA service
- Easy set up with UPnP support
- Support 2-way audio
- Day Night Function With ICR Filter Mechanism
- Support Maxi-Watch Professional IP software (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- SDK for software integration provided

Mechanical Dimension

52 / 57 / 110 / 123.5

Technical Specifications

Model		TCP-690DNU
Image	Device	1/3" SONY SuperHAD CCD
	Effective Pixels	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)
	Horizontal Resolution	540 TVL
Minimum Illumination	Color	0.1 Lux
	B/W	0.05 Lux
	IR Sensitivity	850nM
Lens	Lens Mount	CS
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, , with automatic switch over
Functions	Video Setting	Brightness,Contrast,Saturation.Hue
	Motion Detection	Yes (3 windows)
	Electronic Shutter	1/60(50),1/100,1/250,1/500,1/1000,1/2000,1/5000,1/10000 ~1/100,000 sec
	BLC	Yes
	AGC	Auto
	White Balance	Auto
	Auto Iris Control	Yes
S/N Ratio		> 48 dB
Video Quality	Network Compression	Dual Streaming MPEG-4/MJPEG
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)
	Adjustable Bit Rate	CBR,VBR
	Image Frame Rate	30/25 fps (NTSC/PAL)
Audio Input	Compression	ADPCM
	Audio Line Output	Built-in MicroPhone
Audio Output	Compression	ADPCM
	Audio Line Output	1
Alarm	Alarm Input	2
	Alarm Output	2
Reset Button		Yes
LED		Power LED, Network LED
Network	Ethernet	Ethernet(10/100Base-T) RJ-45 connector
	Protocol	TCP/IP, ICMP, HTTP, FTP, SMTP, DDNS, PPPoE
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password protection: configured by the administrator
Temperature	Operating	-10°C~45°C
	Storage	-30°C~+60°C
Power	Power Requirement	12V or POE (IEEE802.3af) with class3
	Power Consumption	LAN: 450mA, 3W
Physical	Dimensions (W x H x D)	80mm(W) x 65mm(H) x 137mm(D)
	Weight	450 g
Certficate		FCC, CE

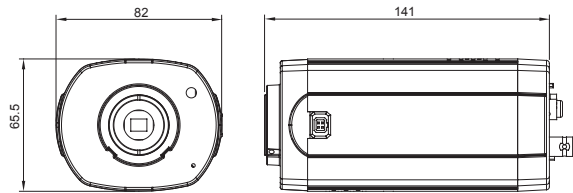▶ Specifications are subjected to change without prior notice.

H.264
IP Wide Dynamic Camera

● Key Features

- D-WDR system
- Next Generation 3D DNR
- Sens-Up function
- Support video out
- Power over Ethernet available
- H.264/ JPEG / MPEG4 compression
- SD card backup
- 2-way audio
- Support Cell Phone/PDA/3GPP

- Triple Streaming
- Wireless available
- SDK for Software Integration
- Free Bundled Basic 36 channel AP Client Software Provided
- Wireless (option) TCP-IPWD700 DN/WI
- ONVIF compliance

● Mechanical Dimension

82   141   65.5

● Technical Specifications

Model		TCP-IPWD700DN
Image	Device	1/3" Sharp CCD
	Effective Pixels	NTSC: 768(H)x494(V) PAL: 752(H)x582(V)
	Horizontal Resolution	560TVL
Minimum Illumination	Color	0.3 Lux
	B/W	0.00001 lux
	IR Sensitivity	Yes
Lens	Lens Mount	CS Mount
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over
Functions	Video Setting	Brightness, Contrast, Saturation, Hue, sharpness, AES, Manual Shutter, IRIS Level, Day and night, Night Mode, 3D DNR, WDR
	Motion Detection	Yes (3 windows)
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000
	BLC	Yes(ON/OFF), HLBLC
	AGC	Yes
	White Balance	Auto
	Auto Iris Control	Yes
S/N Ratio	S/N Ratio	More than 48dB
Video Quality	Network Compression	H.264/ JPEG / MPEG4 compression
	Picture Resolution	Full D1 (NTSC:720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF (NTSC: 352 x 240 PAL: 352 x 288) QCIF (NTSC: 176 x 120 PAL: 176 x 144)
	Adjustable Bit Rate	CBR, VBR
	Image Frame Rate	Full D1 (NTSC:720 x 480 PAL: 720 x 576) 4 CIF (704 x 480, 704 x 576) CIF (NTSC: 352 x 240 PAL: 352 x 288) QCIF (NTSC: 176 x 120 PAL: 176 x 144) at 30/25(NTSC/PAL)
Audio Input	Compression	G.711
	Audio Line Output	Built-in MicroPhone
Audio Output	Compression	G.711
	Audio Line Output	1
Alarm	Alarm Input	1
	Alarm Output	1 (Relay out)
Reset Button		Yes
LED		Signal LED, Power LED
Network	Ethernet	Ethernet (10/100Base-T) RJ-45 connector
	Protocol	TCP-IP, UDP, ICMP, HTTP, FTP, SMTP, DDNS, PPPoE, 3GPP, UPnP, NTP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password protection: configured by the administrator
Temperature Operating		0 ℃ ~ 40 ℃
Power	Power Requirement	DC12V
	Power Consumption	DC 12V: 240mA, 2.8W
Physical	Dimensions (WxHxD)	80mm(W) x 65mm(H) x 137mm(D)
	Weight	290 g
Certficate		FCC, CE

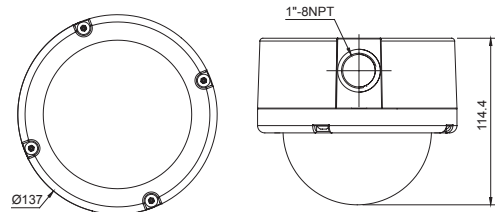▶ Specifications are subjected to change without prior notice.

H.264 Megapixel IP Vandal Dome

● Key Features

- 2.0 Megapixel
- 1/3" Micron Progressive Scan CMOS Megapixel
- Integrated 2.7~9 mm DC Iris lens
- True day & night with Mechanism IR Cut Filter
- IP 66 rated weatherproof housing
- Up to 1600x1200 resolution at 15 fps
- Video motion detection
- Power over Ethernet (IEEE802.3af)

- Dual streaming H.264 / MJPEG/ MPEG4 compression format
- Support 3GPP / PDA Service
- With SD Back up
- Free bundled 36 channel recording software
- SDK For Software Integration
- ONVIF compliance

Mechanical Dimension

1"-8NPT

114.4

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● Technical Specifications

Model		CDV-3VM501
ImageDevice		1/3" Micron Progressive Scan CMOS
Minimum Illumination	Color	0.5 Lux
	B/W	0 Lux
	IR Sensitivity	850nM
	IR LED	IR LED x18 pcs
	CDS Sensor	Yes
	IR Working Distance	12 M
Lens	Lens	Varifocal 2.7 ~ 9mm
	Viewing Angle	127.5°(D) 101°(H) 75°(V)
Camera Angle Adjustment	X (Panning)	180°
	Y (Tilting)	75°
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes
Functions	Video setting	Brightness, Contrast, Sharpness
	Motion Detection	Yes (3 Windows)
	Electronic shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec
	Flickerless	Yes
	BLC	Yes (ON/OFF)
	AGC	Auto
	White Balance	Auto
S/N Ratio		>42dB
Video Quality	Video Compression	H.264/ JPEG/ MPEG4 (3GPP only)
	Picture Resolution	1600x1200, 1280x1024, 1280x960, 1280x720 800x592, 640x480, 320x240, 176x144
	Adjustable Bit Rate	VBR,CBR
	Image Frame Rate	1280x720 at 30fps 1280x960 at 25fps 1280x1024 at 22fps 1280x1200 at 15fps 800x600, 640x480, 320x240, 176x120 at 30/25 (NTSC/PAL) fps
Video Streaming	Streaming 1	H.264 or MJPEG
	Streaming 2	H.264 or MJPEG
	Streaming 3	MPEG4 (3GPP)
Audio Input	Compression	G.711
	Audio Line Input	1
Audio Output	Compression	G.711
	Audio Line Output	1
External I/O	Alarm Input	1
	Alarm Output	1(Relay out)
Reset Button		Yes
Casing Mount Types		Ceiling mount, Wall mount (option)
IP66 Rated		Weatherproof casing with IP66 standard
Network	Ethernet	Ethernet (10/100 Base-T) RJ45 Connector
	Protocol	HTTP, TCP/ IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password Protection: Configured by the Administrator
Temperature	Operating	-10°C~40°C
	Storage	-30°C~+60°C
Power	Power Requirement	DC12V & PoE (IEEE802.3af) with Class 3
	Power Consumption	560mA, 6.12W
Physical	Dimensions (Ø x H)	(W)137 x (H)103
	Weight	700g
Certficate		FCC, CE

▶ Specifications are subjected to change without prior notice.
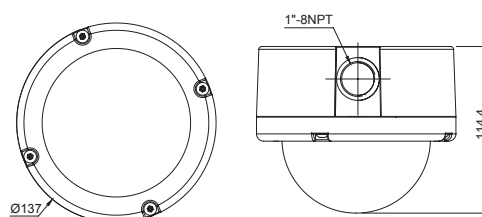
H.264 IP Vandal Dome Indoor / Outdoor CAMERA

● Key Features

- D-WDR
- Support 3D DNR
- Sense up function
- Produce high quality video images with 560 TVL
- Unique design with weatherproof IP66 rated housing
- Compact vandal resistant construction
- Triple streaming H.264 / JPEG/ MPEG4 compression
- Suitable for indoor & outdoor use with roof dome cover

- Support 3GPP / PDA service
- Easy set up with UPnP support
- DSP controls for BLC, white balance and gain control
- Burglarproof screw
- Support Maxi-Watch Professional IP software (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- SDK for software integration provided
- ONVIF compliance

● Mechanical Dimension

1"-8NPT

114.4

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● Technical Specifications

Model		CDV-3VWD960
Image	Device	1/3" CCD
	Effective Pixels	NTSC: 768(H) x 494(V) PAL: 752(H) x 582(V)
	Horizontal Resolution	560TVL
Minimum Illumination	Color	0.1 Lux
	B/W	0Lux
	CDS Sensor	Yes
	IR Sensitivity	Yes
Lens	Lens Mount	3.7~12mm vari-focal lens
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes
Functions	Video setting	Brightness, Contrast, Saturation, Hue, Sharpness, AES, Manual Shutter, IRIS Level
	Motion Detection	Yes (3 windows)
	Electronic Shutter	Auto
	Fixed Shutter	1/60(50), 1/100, 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000
	BLC	Yes (ON/OFF), HLBLC
	AGC	Auto
	White Balance	Auto
	Auto Iris Control	Yes
S/N Ratio	S/N Ratio	NA
Video Compression	Compression	Triple Streaming H.264/MJPEG/MPEG-4
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF: (NTSC: 352 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)
	Bit Rate	VBR, CBR
	Image Frame Rate	30/25 (NTSC/PAL) fps
Audio Input	Compression	G.711
	Audio Line Output	1
Audio Output	Compression	G.711
	Audio Line Output	1
Alarm	Alarm Input	1
	Alarm Output	1 (Relay out)
Reset Button		Yes
LED		Network LED
Network	Ethernet	Ethernet(10/100Base-T) RJ-45 connector
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password protection: configured by the administrator
Operating	Temperature	0 ℃ ~ 40 ℃
Storage		-30 ℃ ~ 60 ℃
Power	Power Requirement	12V or POE
	Power Consumption	490mA
Physical	Dimensions (WxHxD)	(W)137x(H)103
	Weight	800 g
Approvals	Certificate	FCC, CE

▶ Specifications are subjected to change without prior notice.
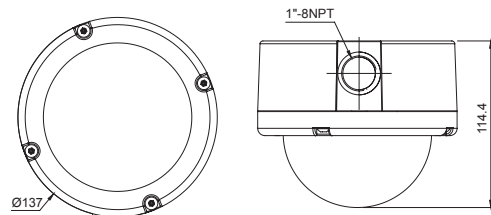
MPEG4/MJPEG
Megapixel IP Vandal Dome Camera

● Key Features

- 1.3 Megapixel
- 1/4" OV Progressive Scan CMOS
- Integrated 3.7~12 mm lens
- True day & night with Mechanism IR Cut Filter
- IP 66 rated weatherproof housing
- Up to SXGA resolution at 10 fps
- Video motion detection

- Power over Ethernet (IEEE802.3af)
- Dual streaming MPEG4/MJPEG compression format
- Support 3GPP / PDA service
- With SD Back up
- Free bundled 36 channel recording software
- Support Maxi-Watch Professional IP Software (option)

● Mechanical Dimension

1"-8NPT

114.4

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● Technical Specifications

Model		CDV-3VM301
Image	Device	1/4" OV Progressive Scan CMOS
Minimum Illumination	Color	1.5 Lux at F1.2
	B/W	0 Lux at F1.2
	IR Sensitivity	850nM
	IR LED	IR LED x12 (850nm)
	IR Working Distance	10M
Lens	Lens	Varifocal 3.7~12mm Lens
	Viewing Angle	56.89°(V) 76.92°(H) 97.61°(D)
Camera Angle Adjustment	X (Panning)	180°
	Y (Tilting)	75 °
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over
Functions	Video Setting	Brightness, Contrast, Exposure, Sharpness
	Motion Detection	Yes (3 Windows)
	Electronic shutter	1/60 (50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec
	Flickerless	Yes
	AGC	Auto
	White Balance	Auto
S/N Ratio		>42 dB
Video Quality	Network Compression	Dual Streaming MPEG4/MJPEG
	Picture Resolution	SXGA (1280x1024) VGA (640x480) CIF (320x240) QCIF(160x120)
	Adjustable Bit Rate	CBR,VBR
	Image Frame Rate	1280x1024 at 10 fps VGA (640x480), CIF (320x240), QCIF (160 X 120) at 30/25 fps (NTSC/PAL)
Audio Input	Compression	ADPCM
	Audio Line Input	1
Audio Output	Compression	ADPCM
	Audio Line Output	1
Alarm	Alarm Input	1
	Alarm output	1(Relay)
Reset Button		Yes
Casing	Mount Types	Ceiling mount, Wall mount (option)
IP66 Rated		Weatherproof casing with IP66 standard
Network	Ethernet	Ethernet (10/100 Base-T) RJ45 Connector
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP, RTP, RTSP, ICMP, ARP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password Protection: Configured by the Administrator
Temperature	Operating	-10°C~40°C
	Storage	-30°C~+60°C
Power	Power Requirement	DC12V & PoE (IEEE802.3af) with Class 3
	Power Consumption	490 mA, 5.8W
Physical	Dimensions (ØxH)	(W)137 x (H)103
	Weight	700g
Certficate		FCC, CE

▶ Specifications are subjected to change without prior notice.

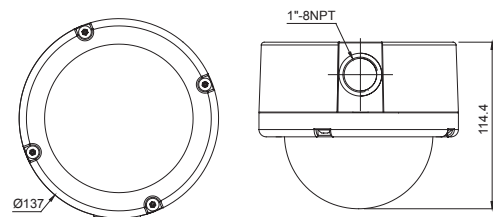# MPEG4/MJPEG IP Vandal Dome

CDV-3V930HDNU   CDV-3V930HU   CDV-3F930HU

● Key Features

- Produce high quality video images with 420 TVL or 540 TV Lines horizontal resolution
- Unique design with weatherproof IP66 rated housing
- Compact vandal resistant construction
- Dual streaming MPEG4 & JPEG compression
- Suitable for indoor & outdoor use with roof dome cover
- Support 3GPP / PDA service
- DSP controls for BLC, white balance and gain control

- Easy set up with UPnP support
- Day & night switchable with ICR mechanism for CDV-3V930HDNU
- Burglarproof screw
- IP 66 Rated housing
- Support Maxi-Watch Professional IP software (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- SDK for software integration provided

● Key Features

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● Technical Specifications

Model		CDV-3V930HDNU	CDV-3V930HU	CDV-3F930HU
Image	Device	1/3" SONY CCD		
	Effective Pixels	PAL: 752(H)x582(V) NTSC: 768(H)x494(V)	PAL: 752(H)x582(V) NTSC: 768(H)x494(V)	NTSC: 752(H)x582(V) NTSC: 768(H)x494(V)
	Horizontal Resolution	Color: 540 TVL B/W : 600 TVL	540 TVL	540 TVL
Minimum Illumination	Color	Color: 0.1 Lux	Color: 0.1 Lux	Color: 0.1 Lux
	B/W	0Lux	NA	NA
	CDS Sensor	Yes	NA	NA
	IR Sensitivity	850nM	NA	
Lens	Lens Mount	3.7~12mm vari-focal lens		3.6(standard), 4.3mm, 6mm, 8mm, 12mm (option)
Synchronization	Sync. System	Internal		
Day/Night Functions	Mechanical IR Cut Filter	Yes	Color or software Day Night (option)	
Functions	Video setting	Brightness,Contrast,Saturation,Hue		
	Motion Detection	Yes (3 windows)		
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec		
	BLC	Yes (ON/OFF)		
	AGC	Auto		
	White Balance	Auto		
	Auto Iris Control	DC Iris	DC Iris	NA
S/N Ratio	S/N Ratio	> 48 dB		
Video Compression	Network Compression	Dual Streaming MPEG-4/MJPEG		
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)		
	Bit Rate	VBR,CBR		
	Image Frame Rate	30/25 fps (NTSC/PAL)		
Audio Input	Compression	ADPCM		
	Audio Line Output	1		
Audio Output	Compression	ADPCM		
	Audio Line Output	1		
Alarm	Alarm Input	1		
	Alarm Output	1(Relay out)		
Reset Button		Yes		
LED		Power LED, Network LED		
IP66 Rated		Weatherproof casing with IP66 standard		
Network	Ethernet	Ethernet(10/100Base-T) RJ-45 connector		
	Protocol	HTTP, TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP		
Software	Web Browser	Microsoft Internet Explorer 6.0 or above		
	SDK	Yes		
	Security	Password protection: configured by the administrator		
Temperature	Operating	-10°C ~ 45°C		
	Storage	-30°C ~ +60°C		
Power	Power Requirement	DC12V or POE (IEEE802.3af)		
	Power Consumption	490mA, 5.8W		
Physical	Dimensions (W x H x D)	(W)137 x (H)103		
	Weight	800 g		
Certficate		FCC, CE		

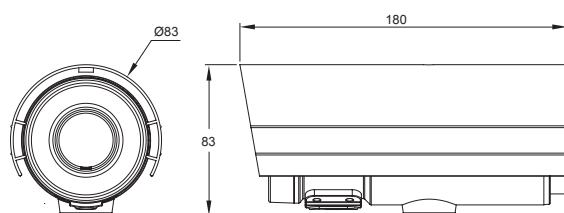▶ Specifications are subjected to change without prior notice.

H.264 Megapixel IR IP Camera

● Key Features

- 2.0 Megapixel 1600 x 1200
- 1/3" Progressive Scan CMOS
- Integrated 3.6~16 mm lens
- True day & night with Mechanism IR Cut Filter
- IP 66 rated weatherproof housing
- Up to 1600x1200 resolution at 15 fps
- Video motion detection
- DC12V or Power over Ethernet (IEEE802.3af)

- Triple streaming H.264 / JPEG / MPEG4 compression format
- Support 2 Way Audio
- Support cell phone / PDA / 3GPP
- Free bundled 36 channel recording software
- SDK For Software Integration
- Support Maxi-Watch Professional IP Software (option)
- ONVIF compliance

● Mechanical Dimension

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● Technical Specifications

Model		TCP-VM501
Image Device		1/3" Micron Progressive Scan CMOS
Minimum Illumination	Color	0.5 Lux
	B/W	0 Lux (LED on)
	IR Sensitivity	850nM
	IR LED	IR LED x 35 pcs
	CDS Sensor	Yes, with automatic switch over
	IR Working Distance	20 M
Lens	Lens	Varifocal 3.6 ~ 16mm
	Viewing Angle	100° (D) 75.4° (H) 54.9° (V)
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes
Functions	Video setting	Brightness, Contrast, Sharpness, Night Mode
	Motion Detection	Yes (3 Windows)
	Electronic Shutter	Auto
	Flickerless	Yes
	BLC	Yes (ON/OFF)
	AGC	Auto
	White Balance	Auto
S/N Ratio		>42 dB
Video Quality	Network Compression	H.264 / JPEG /MPEG4 Compression Format
	Picture Resolution	1600x1200, 1280x1024, 1280x960,1280x720, 800x600, 640x480, 320x240, 176x120
	Bit Rate	VBR, CBR
	Image Frame Rate	1600x1200@15FPS 1280x1024@22FPS 1280x960@25FPS 1280x720@30FPS
Video Streaming	Streaming 1	H.264 or MJPEG
	Streaming 2	H.264 or MJPEG
	Streaming 3	MPEG4
Audio Input	Compression	G.711
	Audio Line Input	1
Audio Output	Compression	G.711
	Audio Line Output	1
External I/O	Reset Button	Yes
	LED	Network LED
IO		1 relay in / 1 relay out
IP66 Rated		Weatherproof casing with IP66 standard
Network	Ethernet	Ethernet (10/100 Base-T), RJ45 Connector
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP, RTP, RTSP, ICMP, ARP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password Protection: Configured by the Administrator
Operating Temperature		0 °C ~ 40 °C
Power	Power Requirement	DC 12V & PoE(IEEE802.3af) with class 3
	Power Consumption	450mA, 6.2W
Physical	Dimensions (Ø x L)	83mm(Ø) x 180mm(L)
	Weight	700 g
Certficate		FCC, CE

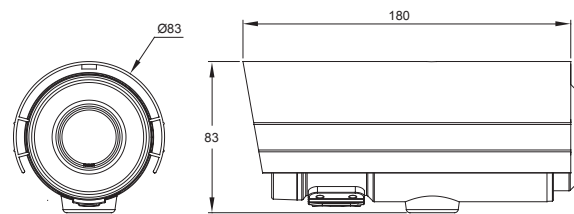▶ Specifications are subjected to change without prior notice.

H.264 WDR IP Camera

● Key Features

- D-WDR
- Support 3D DNR
- Sens-Up Function
- IP66
- External Vari-focal lens adjustment
- True Day/Night Function
- Mechanism IR Cut Filter available
- IR Distance: 20 Meter
- H.264/MJPEG/MPEG4 compression
- Support cell phone/PDA/3GPP

- Triple streaming
- SDK for software integration
- Free Bundle 36 Channel Recording Software
- 8 Step shutter Adjustment
- Free bundled basic 36 Channel recording software provided
- Support Maxi-Watch Professional IP software (option).
- ONVIF compliance

● Mechanical Dimension

Ø83   180   83

● Technical Specifications

Model		TCP-IRWH540P/N
Image	Device	1/3" CCD Sensor
	Effective Pixels	NTSC: 768(H) x 494(V) PAL: 752(H) x 582(V)
Minimum Illumination	Color	0.5 Lux
	B/W	0 Lux (LED on)
	Horizontal Resolution	560 TVL
	IR Sensitivity	850nm
	IR LED	IR LED x35 pcs
	CDS Sensor	Yes
	IR Working Distance	20M
Lens	Lens	Varifocal 3.7 ~ 12 mm Lens
	Viewing Angle	96.2°(D)x75.4°(H)x55.6°(V)
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over
Functions	Video Setting	Brightness, Contrast, Saturation, Hue, Sharpness, AES, Manual Shutter, IRIS Level, BLC
	Motion Detection	Yes (3 Windows)
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000
	BLC	Yes (ON/OFF), HL BLC
	AGC	Auto
	White Balance	Auto
S/N Ratio		> 48 dB
Video Quality	Network Compression	Triple streaming H.264/MJPEG/MPEG4 compression
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF: (NTSC: 352 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)
	Adjustable Bit Rate	VBR, CBR
	Image Frame Rate	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF: (NTSC: 352 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144) at 30/25 fps (NTSC/PAL)
Reset Button		Yes
LED		Network LED
I/O		1in / 1Relay Out
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password protection: configured by the administrator
IP66 Rated		Weatherproof casing with IP66 standard
Temperature Operating		0 ℃ ~ 40 ℃
Power	Power Requirement	12V
	Power Consumption	450mA, 5.4W
Physical	Dimensions (ØxL)	83mm(Ø)x180(D)
	Weight	700g
Certficate		FCC, CE

▶ Specifications are subjected to change without prior notice.
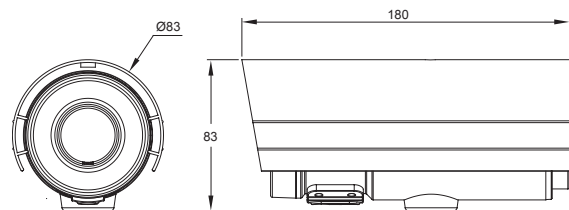
MPEG4/MJPEG
Megapixel IR IP Camera

● Key Features

- 1/4" OV Progressive Scan CMOS
- Integrated 2.8~10.5 mm/ F1.2 megapixels lens
- True day & night with Mechanism IR Cut Filter
- IP 66 rated weatherproof housing
- Up to SXGA resolution at 10 fps
- Hardware motion detection
- DC12V or Power over Ethernet (IEEE802.3af)
- Support 3GPP / PDA service
- Dual streaming MPEG4/MJPEG compression format
- Free bundled 36 channel recording software
- Support Maxi-Watch Professional IP Software (option)

● Mechanical Dimension

● Technical Specifications

Model		TCP-VM201
Image	Device	1/4" OV Progressive Scan CMOS
Minimum Illumination	Color	1.5 Lux
	B/W	0 Lux (LEDs on)
	IR Sensitivity	850nM
	IR LED	IR LED x 35 pcs
	CDS Sensor	Yes
	IR Working Distance	20 M
Lens	Lens	Varifocal 2.8 ~ 10.5 mm (external adjustment)
	Viewing Angle	132.2° (D) 101.8° (H) 73.7° (V)
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over
Functions	Video Setting	Brightness, Contrast, Exposure, Sharpness
	Motion Detection	Yes (3 Windows)
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec
	Flickerless	Yes
	BLC	Yes
	AGC	Auto
	White Balance	Auto
S/N Ratio		>42 dB
Video Quality	Network Compression	Dual Steaming MPEG-4 / MJPEG
	Picture Resolution	SXGA (1280x1024); VGA (640x480); CIF (320x240); QCIF (160 X 120)
	Adjustable Bit Rate	CBR, VBR
	Image Frame Rate	SXGA(1280x1024) at 10 fps VGA (640x480), CIF (320x240), QCIF(160 X 120) at 30/25fps (NTSC/PAL)
Reset Button		Yes
LED		Network LED
IP66 Rated		Weatherproof casing with IP66 standard
Network	Ethernet	Ethernet (10/100 Base-T) RJ45 Connector
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP, RTP, RTSP, ICMP, ARP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password Protection: Configured by the Administrator
Temperature	Operating	-10°C~40°C
	Storage	-30°C~+60°C
Power	Power Requirement	12V & PoE (IEEE802.3af) with class 3
	Power Consumption	450mA, 5.4W
Physical	Dimensions (Ø x L)	83mm(Ø) x 180mm(D)
	Weight	700 g
Certficate		FCC, CE

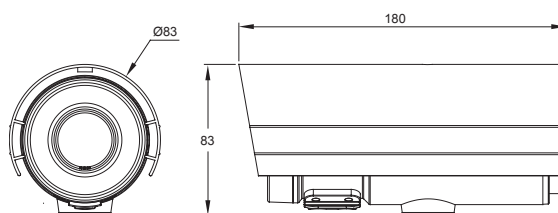▶ Specifications are subjected to change without prior notice.

MPEG4/MJPEG IP IR Camera

● Key Features

- High horizontal resolution 540 TV Lines
- Built in varifocal lens 3.7 ~ 12mm lens
- True day & night with ICR filer mechanism
- MPEG4 / MJPEG dual streaming network
- IP 66 rated housing
- IR distance: 20M

- Support mobile 3GPP / PDA service
- Free bundled basic 36 Channel recording software provided
- Support Maxi-Watch Professional IP software (option).

● Mechanical Dimension

Ø83   180   83

● Technical Specifications

Model		TCP-IRV540P/N
Image	Device	1/3" Sony CCD
	Size	1/3 inch
Minimum Illumination	Color	0.1 Lux
	B/W	0 Lux
	IR Sensitivity	850 nM
	IR LED	IR LED x35 pcs
	CDS Sensor	Yes
	IR Working Distance	20 M
Lens	Lens	Varifocal 3.7 ~ 12 mm Lens
	Viewing Angle	132.2°(D) Lens 101.8°(H) 73.7°(V)
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over
Functions	Video Setting	Brightness,Contrast,Saturation,Hue
	Motion Detection	Yes (3 Windows)
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec
	AGC	Auto
	White Balance	Auto
S/N Ratio		> 48 dB
Video Quality	Network Compression	Dual Streaming MPEG-4 / MJPEG
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 352 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)
	Adjustable Bit Rate	VBR, CBR
	Image Frame Rate	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 352 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144) at 30/25 fps (NTSC/PAL)
Reset Button		Yes
LED		Network LED
Network	Ethernet	Ethernet(10/100 Base-T) RJ-45 connector
	Protocol	HTTP, TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password protection: configured by the administrator
IP66 Rated		Weatherproof casing with IP66 standard
Temperature	Operating	-10ºC ~ 45ºC
	Storage	-30ºC ~ +60ºC
Power	Power Requirement	12VDC
	Power Consumption	450mA, 5.4W
Physical	Dimensions (Ø x L)	83mm(Ø) x 180(D)
	Weight	700g
Certficate		FCC, CE

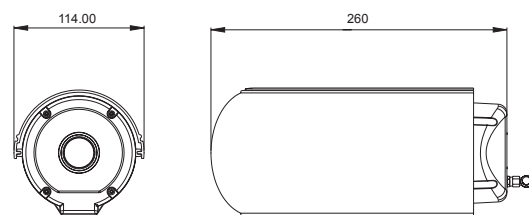▶ Specifications are subjected to change without prior notice.

TCP-IR590X Series
H.264 WDR Outdoor IP Camera

● Key Features

- D-WDR
- Support 3D DNR
- Sens-Up Function
- IP66
- External Vari-focal lens adjustment
- True Day/Night Function
- Mechanism IR Cut Filter available
- Fan Built-in
- Two-Way audio
- IR Distance: 50/30 Meter

- H.264/MJPEG/MPEG4 compression
- Support cell phone/PDA/3GPP
- Triple streaming
- SDK for software integration
- Free Bundle 36 Channel Recording Software
- 8 Step shutter Adjustment
- Free Bundle 36 Channel Recording Software
- Support Maxi-Watch Professional IP software (option).
- ONVIF compliance

● Mechanical Dimension

114.00   260

● Technical Specifications

Model		TCP-IR590-WD30	TCP-IR590-WD50
Image	Device	1/3" CCD	
	Effective Pixels	NTSC: 768(H) x 494(V) PAL: 752(H) x 582(V)	
	Horizontal Resolution	560 TVL	
Minimum Illumination	Color	0.5 Lux	
	B/W	0 Lux	
	IR Sensitivity	850nm	
	IR LED	42 Unit	21 Unit+ E Power 7 Unit
	CDS Sensor	Yes	
	IR Working Distance	30M	50M
Lens	Focal Length	Varifocal 3.7 ~ 12 mm Lens	Varifocal 9 ~ 22 mm Lens
	Viewing Angle	96.2°(D) x 75.4°(H) x 55.6°(V)	40.2°(D) x 31.2°(H) x 22.8°(V)
Synchronization	Sync. System	Internal	
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over	
Functions	Video Setting	Brightness, Contrast, Saturation, Hue, Sharpness, AES, Manual Shutter, IRIS Level, BLC	
	Motion Detection	Yes(3 Windows)	
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000	
	AGC	Auto	
	BLC	Yes(ON/OFF), HLBLC	
	White Balance	Auto	
	Flickerless	Yes	
	Auto Iris Control	Yes	
S/N Ratio	S/N Ratio	>48dB	
Video Quality	Network Compression	Triple streaming H.264/MJPEG/MPEG4 compression	
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)	
	Bit Rate	VBR,CBR	
	Image Frame Rate	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144) at 30/25 fps (NTSC/PAL)	
Video Output	Composite Output	Yes	
Alarm	Alarm Input	1	
	Alarm Output	1(Relay)	
Reset Button		Yes	
LED		Network LED	
I/O		1 in / 1 out (Relay Out)	
Casing	IP66 Rated	Weatherproof casing with IP66 standard	
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector	
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP	
Software	Web Browser	Microsoft Internet Explorer 6.0 or above	
	SDK	Yes	
	Security	Password protection: configured by the administrator	
Temperature Operating		0 °C ~ 40 °C	
Power	Power Requirement	DC 12V	
	Power Consumption	12.5W	
Physical	Dimensions (ØxL)	114mm(Ø) x 260mm(L)	
	Weight	1600g	
Certficate		FCC, CE	

▶ Specifications are subjected to change without prior notice.
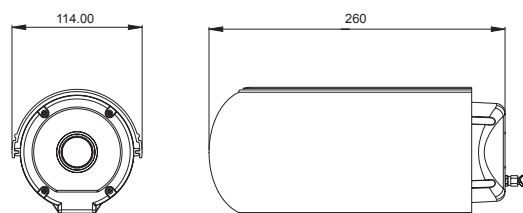
H.264
Outdoor IP Camera

● Key Features

- IP66
- 720P @ 30FPS
- 2Mega pixel CMOS sensor
- External Vari-focal lens adjustment
- True Day/Night Function
- Mechanism IR Cut Filter available
- Fan Built-in
- Two-Way audio
- IR Distance: 40/30 Meter
- H.264/MJPEG/MPEG4 compression
- Support cell phone/PDA/3GPP
- Triple streaming
- SDK for software integration
- Free Bundle 36 Channel Recording Software
- Support Maxi-Watch Professional IP software (option).
- ONVIF compliance

● Mechanical Dimension

114.00   260

● Technical Specifications

Model		TCP-IRH5030C	TCP-IRH5040C
Image	Device	1/3" CMOS Sensor	
Minimum Illumination	Color	0.5 Lux	
	B/W	0 Lux	
	IR Sensitivity	850nm	
	IR LED	42 Unit	56 Unit
	CDS Sensor	Yes	
	IR Working Distance	30M	40M
Lens	Focal Length	Varifocal 3.6 ~ 16 mm Lens	
	Viewing Angle	100°(D) 75.4°(H) 54.9°(V)	
Synchronization	Sync. System	Internal	
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over	
Functions	Video Setting	Brightness, Contrast, Sharpness, Night Mode	
	Motion Detection	Yes(3 Windows)	
	Electronic Shutter	Auto	
	BLC	Yes(ON/OFF)	
	AGC	Auto	
	White Balance	Auto	
	Flickerless	Yes	
	Auto Iris Control	Yes	
S/N Ratio	S/N Ratio	>42dB	
Video Quality	Network Compression	Triple Streaming H.264/ JPEG / MPEG4 compression	
	Picture Resolution	1600x1200, 1280x1024, 1280x960, 1280x720, 800x600, 640x480, 320x240, 176x120	
	Bit Rate	VBR, CBR	
	Image Frame Rate	1600 x 1200@15FPS 1280 x 1024@22FPS 1280 x 960@25FPS 1280 x 720@30FPS	
Video Output	Composite Output	Yes	
Alarm	Alarm Input	1	
	Alarm Output	1 (Relay)	
Reset Button		Yes	
LED		Network LED	
I/O		1 in / 1 out (Relay Out)	
Casing	IP66 Rated	Weatherproof casing with IP66 standard	
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector	
	Protocol	HTTP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP	
Software	Web Browser	Microsoft Internet Explorer 6.0 or above	
	SDK	Yes	
	Security	Password protection: configured by the administrator	
Temperature Operating		0 ℃ ~ 40 ℃	
Power	Power Requirement	DC 12V	
	Power Consumption	12.5W	
Physical	Dimensions (ØxL)	114mm(Ø) x 260mm(L)	
	Weight	1600 g	
Certficate		FCC, CE	

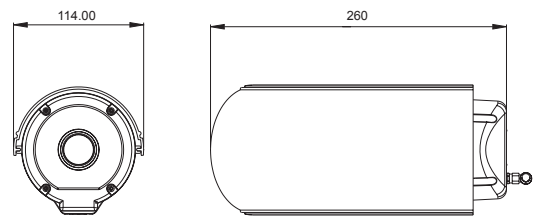▶ Specifications are subjected to change without prior notice.

MPEG4/MJPEG
Outdoor IP Camera

● Key Features

- Weatherproof enclosure IP66 rated
- External Varifocal lens adjustment
- Super high horizontal resolution 540 TV Lines
- External Varifocal lens adjustment
- Fan built-in
- IR distance 30M / 40M / 50M
- MPEG4 / MJPEG Compression format
- Mechanical ICR for true day & night

- Support cell phone / PDA / 3GPP
- Dual streaming MPEG4 / MJPEG
- SDK for software integration
- 8 step manual shutter control
- Free bundled basic 36 channel recording software provided
- Support Maxi-Watch Professional IP software (option).

● Mechanical Dimension

114.00   260

● Technical Specifications

Model		TCP-IRV560/30M	TCP-IRV560/40M	TCP-IRV560/50M
Image	Device	1/3" SONY CCD		
	Effective Pixels	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)		
	Horizontal Resolution	540 TVL		
Minimum Illumination	Color	0.1		
	B/W	0 Lux		
	IR Sensitivity	850nM		
	IR LED	42 Unit	56 Unit	21 Unit+7 E-Power
	CDS Sensor	Yes		
	IR Working Distance	30M	40M	50M
Lens	Focal Length	Varifocal 3.7 ~ 12 mm Lens	Varifocal 9 ~ 22 mm Lens	
	Viewing Angle	96.2°(D) 75.4°(H) 55.6°(V	40.2°(D) 31.2°(H) 22.8°(V)	
Synchronization	Sync. System	Internal		
Day/Night Functions	Mechanical IR Cut Filter	Yes, with automatic switch over		
Functions	Video Setting	Brightness, Contrast, Saturation, Hue		
	Motion Detection	Yes (3 Windows)		
	Electronic Shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec		
	AGC	Auto		
	White Balance	Auto		
	Flickerless	Yes		
	Auto Iris Control	Yes		
S/N Ratio	S/N Ratio	>48dB		
Video Quality	Network Compression	Dual Streaming MPEG-4 / MJPEG		
	Picture Resolution	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144)		
	Bit Rate	VBR, CBR		
	Image Frame Rate	Full D1 (NTSC: 720 x 480 PAL: 720 x 576) Resolution 4 CIF (704x480, 704x576) CIF: (NTSC: 320 x 240 PAL: 352 x 288) QCIF: (NTSC: 176 x 120 PAL: 176 x 144) at 30/25 fps(NTSC/PAL)		
Video Output	Composite Output	Yes		
Alarm	Alarm Input	1		
	Alarm Output	1(Relay)		
Reset Button		Yes		
LED		Network LED		
Casing	IP66 Rated	Weatherproof casing with IP66 standard		
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector		
	Protocol	HTTP, TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP		
Software	Web Browser	Microsoft Internet Explorer 6.0 or above		
	SDK	Yes		
	Security	Password protection: configured by the administrator		
Temperature	Operating	-10°C ~ 45°C		
	Storage	-30°C ~ +60°C		
Power	Power Requirement	AC 90V~260V		
	Power Consumption	12.5W		
Physical	Dimensions (Ø x L)	114mm(Ø) x 260mm(L)		
	Weight	1600g		
Certficate		FCC, CE		

▶ Specifications are subjected to change without prior notice.
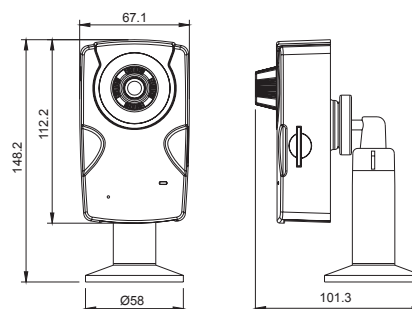
MPEG4/MJPEG
Mini Square Megapixel IP Camera

TCMA-99

TCMA-99W

Key Features

- 1.3 Megapixel (SXGA Resolution)
- MPEG4/MJPEG compression format
- SD card back up
- 2 way audio
- Support cell phone/PDA/3GPP
- Dual streaming MPEG4 & JPEG compression format
- SDK for software integration
- Wireless available
- Free bundled basic 36 channel recording software provided
- Alarm I/O 1 input/1 output

Mechanical Dimension

67.1
148.2
112.2
Ø58
101.3

Technical Specifications

Model		TCMA-99	TCMA-99W
Image Device		1/4" OV Progressive CMOS	
Minimum Illumination	Color	1.5Lux at F1.2	
Lens	Lens	Fixed Lens 4.0 mm / F2.0	
Synchronization	Sync. System	Internal	
Functions	Video Setting	Brightness, Contrast, Exposure, Sharpness	
	Motion Detection	Yes (3 windows)	
	Electronic shutter	1/60(50), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000~1/100,000 sec	
	Flickerless	Yes	
	AGC	Auto	
	White Balance	Auto	
S/N Ratio		42dB	
Video Quality	Network Compression	Dual Steaming MPEG-4 / MJPEG	
	Picture Resolution	SXGA (1280x1024) VGA (640x480) CIF (320x240) QCIF (160x120)	
	Adjustable Bit Rate	CBR, VBR	
	Image Frame Rate	1280x1024 at 10 fps VGA (640x480) CIF (320x240) QCIF (160x120) at 30/25 fps (NTSC/PAL)	
Audio Input	Compression	ADPCM	
	Built-in Microphone	Yes	
Audio Output	Compression	ADPCM	
	Audio Line Output	1	
External I/O	Alarm input	1	
	Alarm Output	1	
Reset Button		Yes	
LED		Power LED, Network LED	
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector	
	Protocol	HTTP, TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP	
Software	Web Browser	Microsoft Internet Explorer 6.0 or above	
	SDK	Yes	
	Security	Password protection: configured by the administrator	
Temperature	Operating	-10℃~40℃	
	Storage	-30℃~+60℃	
Power	Power Requirement	DC 12V & PoE (IEEE 802.3af) with Class 3	DC 12V
	Power Consumption	LAN: 200mA, 2.4W	WLAN: 250mA, 2.4W
Physical	Dimensions (W x H x D)	67.1mm(W) x 111.7(H) x 50.6(D)	
	Weight	180g	
Certficate		FCC, CE	

▶ Specifications are subjected to change without prior notice.

MPEG4/MJPEG
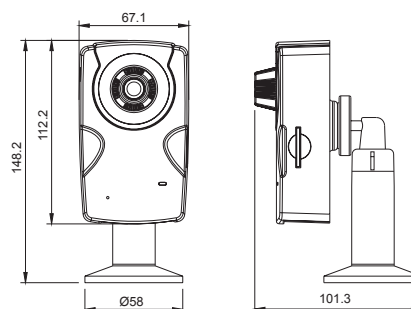# Mini Square IP Camera

TCMP-99   TCMP-99W

● Key Features

- MPEG4 Compression format
- SD card back up
- 2 way audio
- Support cell phone / PDA / 3GPP
- Dual streaming
- SDK for software integration
- Wireless available
- Support Maxi-Watch Professional IP software (option).
- Free bundled basic 36 channel recording software provided
- Alarm I/O 1 input / 1 output

● Mechanical Dimension

67.1
112.2
148.2
Ø58
101.3

● Technical Specifications

Model		TCMP-99	TCMP-99W
Device		1/4" OV CMOS	
Minimum Illumination	Color	1.0 Lux	
Lens	Lens	Fixed lens 4.0 mm / F2.0	
Synchronization	Sync. System	Internal	
Functions	Video Setting	Brightness, Contrast, Exposure, Sharpness	
	Motion Detection	Yes (3 windows)	
	Electronic shutter	Auto	
	Flickerless	Yes	
	AGC	Yes	
	White Balance	Yes	
S/N Ratio		50dB	
Video Quality	Video Compression	Dual Steaming MPEG-4	
	Picture Resolution	VGA (640x480) CIF (320x240) QCIF(160 X 120)	
	Adjustable Bit Rate	CBR, VBR	
	Image Frame Rate	30/25 fps NTSC/PAL	
Audio Input	Compression	ADPCM	
	Built-in Microphone	Yes	
Audio Output	Compression	ADPCM	
	Audio Line Output	1	
Alarm	Alarm Input	1	
	Alarm Output	1	
Reset Button		Yes	
LED		Power LED, Network LED	
Network	Ethernet	Ethernet (10/100 Base-T) RJ-45 connector	
	Protocol	HTTP, TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP	
Software	Web Browser	Microsoft Internet Explorer 6.0 or above	
	SDK	Yes	
	Security	Password protection: configured by the administrator	
Temperature	Operating	-10℃ ~ 45℃	
	Storage	-30℃ ~ +60℃	
Power	Power Requirement	DC 12V or PoE (IEEE 802.3af) with Class 3	DC 12V
	Power Consumption	LAN: 200mA, 2.4W	WLAN: 250mA, 2.4W
Physical	Dimensions (W x H x D)	67.1mm(W) x 111.7(H) x 50.6mm(D)	
	Weight	180g	
Certficate		FCC, CE	

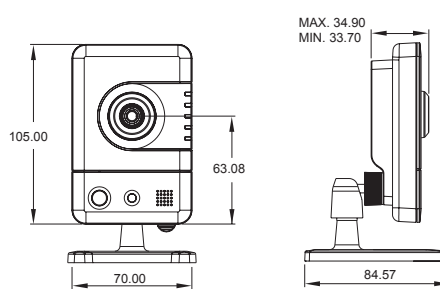▶ Specifications are subjected to change without prior notice.

Megapixel Network Camera

Key Features

- Functional and smart design
- Multiple H.264 streams
- Built in microphone & speaker
- H.264 , MPEG4, and MJPEG triple code compression
- Resolution 1280 x 800
- Easy & flexible installation
- PIR sensor and illumination LED
- Support Maxi-watch Professional
  IP Software (option)
- Free bundled 64 channel recording software
- ONVIF compliance

Mechanical Dimension

MAX. 34.90
MIN. 33.70
105.00
63.08
70.00
84.57

Technical Specifications

Model	GP-100CB	WGP-100-CB
Sensor Type	1/4" Megapixel CMOS Sensor	
Sensor Resolution	1280x800	
Minimum Illumination	0 Lux (with LED), 1 Lux (without LED)	
Maximum Image Resolution	1200 x 800: 15 fps 640 x 400: 30 fps	
Audio	2 way audio	
Lens Type	Board fixed 3.6 mm lens at F2.3	
Wired or Wireless	Wired	Wireless
Auto Exposure Control	Yes	
AGC	Yes	
AWB	Yes	
Ethernet	One 10/100 Mbps RJ 45	
Wifi	-n/a-	802.11 b/g/n
Interface & Buttons	Micro SD card slot / DC power connector / Ethernet cable connector , Privacy button / WPS Button / Reset button / Microphone / PIR sensor / Speaker / Illuminator LED	
Support Protocols	TCP/IP, UDP, ICMP, DHCP, NTP, DNS, DDNS. SMTP, FTP, HTTP, Samba, PPPoE, UpnP, Bonjour, RTP, RTSP, RTCP	
Audio	Built in microphone & speaker	
Power	DC12V / 1A (power supply)	
Operating Temperature	0°C ~ 50°C	
Operating Humidity	10% ~ 80%	
Weight	GP-100CB: 0.103 kgs WGP-100-CB: 0.108 kgs	
Dimension	29(L) x 70 (W) x 105 (H) mm	

▶ Specifications are subjected to change without prior notice.
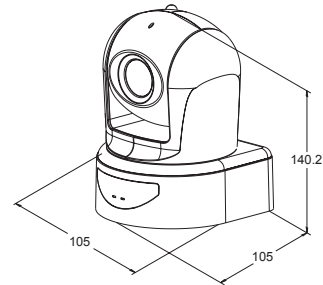
Megapixel Network Camera

Key Features

- Functional and smart design
- Multiple H.264 streams
- H.264, MPEG4, and MJPEG triple code compression
- Resolution 1280 x 800
- Easy & flexible installation
- Built in microphone
- Support Maxi-watch Professional
  IP Software (option)
- Free bundled 64 channel recording software
- ONVIF compliance

Mechanical Dimension

MAX. 34.90
MIN. 33.70

127.57

75.00

84.57

Technical Specifications

Model	GE-100CB	WGE-100-CB
Sensor Type	1/4" Megapixel CMOS Sensor	
Sensor Resolution	1280 x 800	
Minimum Illumination	1 Lux	
Maximum Image Resolution	1200 x 800: 15 fps 640 x 400: 30 fps	
Audio	AMR/G.726 Omni-directional Microphone Frequency: 50 – 20000Hz	
Lens Type	Board fixed 3.6 mm lens at F2.3	
Image Compression	H.264 / MPEG4 / MJPEG	
Auto Exposure Control	Yes	
AGC	Yes	
AWB	Yes	
Audio	Built in microphone	
Ethernet	One 10/100 Mbps RJ 45	
Wifi	-n/a-	802.11 b/g/n
Interface & Buttons	DC power connector / Ethernet cable connector , Privacy button / WPS Button / Reset button / Microphone	
Support Protocols	TCP/IP, UDP, ICMP, DHCP, NTP, DNS, DDNS. SMTP, FTP, HTTP, Samba, PPPoE, UpnP, Bonjour, RTP, RTSP, RTCP	
Power	DC12V / 1A (power supply)	
Operating Temperature	0°C ~ 50°C	
Operating Humidity	10% ~ 80%	
Weight	GE-100CB: 0.097 kgs WGE-100-CB: 0.103 kgs	
Dimension	29(L) x 70 (W) x 105 (H) mm	

▶ Specifications are subjected to change without prior notice.

H.264
IP Pan/Tilt Network Camera

● Key Features

- Remote Pan 270° Tilt 120°
- H.264/ MJPEG/MPEG4 compression
- Day/Night Function- IR Cut Filter(ICR)
- Power over Ethernet available
- Support SD card
- 2-Way Audio
- Triple Streaming
- Support Cell Phone/PDA/3GPP
- SDK for Software Integration
- Free bundled 36 channel recording software
- Support Maxi-Watch Professional IP software (option)
- ONVIF compliance

● Mechanical Dimension

140.2
105
105

● Technical Specifications

Model		MD-D1612
IImage	Device	1/4" CCD
	Effective Pixels	PAL: 512(H)x582(V) NTSC: 512(H)x492(V)
	Horizontal Resolution	420TVL
Minimum Illumination	Color	0.1 Lux
	B/W	0.1 Lux
Lens	Lens Mount	Auto Focus 12x zoom Lens
Synchronization	Sync. System	Internal
Day/Night Functions	Mechanical IR Cut Filter	Yes
Functions	Video setting	Brightness, Contrast, Saturation, Hue, Sharpness
	Motion Detection	Yes (3 Windows)
	Fixed Shutter (Manual)	1/50(60)~1/100000s
	Flickerless	YES
	AGC	Auto
	White Balance	Auto, Daylight, Cloudy, Tungsten Lamp, Fluorescent
S/N Ratio	S/N Ratio	>50 dB
Video Compression	Compression	H.264/ M-JPEG/ MPEG4(3GPP only)
	Picture Resolution	NTSC: 720x480, 704x480, 352x240, 176x144 PAL: 720x576, 704x576, 352x288, 176x144
	Bit Rate	VBR, CBR
	Image Frame Rate	at 30/25 (NTSC/PAL) fps
Video Streaming	Streaming 1	H.264 or MJPEG
	Streaming 2	H.264 or MJPEG
	Streaming 3(3GPP)	MPEG4
Audio Input	Compression	G.711
	Audio Line Input	1
Audio Output	Compression	G.711
	Audio Line Output	1
Alarm	Digital Input	1
	Digital Output	1
Reset Button		Yes
LED		Power and Network LED
Network	Ethernet Port	Ethernet (10/100 Base-T)
	Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP
Software	Web Browser	Microsoft Internet Explorer 6.0 or above
	SDK	Yes
	Security	Password Protection: Configured by the Administrator
Operating	Temperature	-10°C ~40°C
Storage		-30°C ~60°C
Power	Power Requirement	12V or PoE (IEEE 802.3af) with Class 3
	Power Consumption	510mA, 7.8W
Physical	Dimensions (WxHxD)	105mm(W)x105mm(H)x140.2mm(D)
	Weight	550 g
Approvals	Certificate	CE, FCC

▶ Specifications are subjected to change without prior notice.
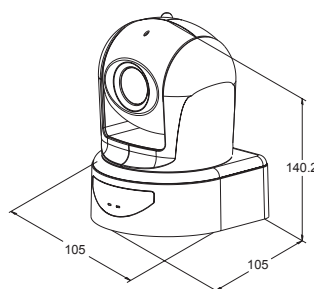
MPEG4/MJPEG
IP Pan/Tilt Network Camera

● Key Features

- Remote Pan (270°)/Tilt (120°)/Zoom 12X optical Control
- IR Cut Filter (ICR)
- MPEG4/JPEG Compression format
- SD Card back up
- 2 way audio
- Support cellphone/PDA/3GPP
- SDK for software integration

- Dual Streaming MPEG4 & JPEG compression
- Wireless (option)
- Free Bundle Basic 36 Channel Recording Software Provided
- Support Maxi-Watch Professional IP software (option).
- ONVIF compliance

● Mechanical Dimension

140.2
105
105

● Technical Specifications

Model	MD-D1200	MD-D1200WI (Wireless)
CCD Sensor	1/4" CCD	
Lens Type	Auto focus zoom lens	
Video Resolution	Full D1 (NTSC:720 x 480 PAL: 720 x 576) 4 CIF (704x480, 704x576) CIF (NTSC: 320 x 240 PAL: 352 x 288) QCIF (NTSC: 160 x 120 PAL: 176 x 144)	
Zoom Ratio	12x Optical zoom	
Focal Length	F(wide) 3.8 mm to f(tele) 45.6 mm	
Maximum Aperture	F(wide)= 1:1.6, F (tele)= 1:2.7	
Angle View (H,V)	Wide: 52.8°, 39.7°, Tele: 4.49°, 3.40°	
Pan Angle	270°	
Tilt Angle	120°	
Pan/Tilt Zoom control	Yes, remotely	
Preset Point	9	
Patrol/Auto Pan	Yes (once)	
Sensitivity	0.1 Lux F1.6	
Electronic Shutter	1/50 (1/60) ~ 1/100000s	
White Balance Mode	ATW, AWB, Indoor, Outdoor	
Video adjust	Brightness, Contrast, Saturation, Hue	
Video Out	1 (RCA type)	
Alarm I/O	1 in / 1 out	
Audio in/out	1 in / 1 out (2.5 mm Phone Jack)	
Audio	Yes, 2 Way (Duplex Support)	
Dual Streaming	Yes	
Image snapshot	Yes	
Full screen monitoring	Yes	
Compression format	Dual Streaming (MPEG-4 / MJPEG)	
Image Frame Rate	30/25 fps (NTSC/PAL)	
Video bitrate adjust	CBR, VBR	
Motion Detection	Yes, 3 different areas	
Triggered action	Mail, FTP, Save to SD card	
Pre/Post alarm	Yes, configurable	
Security	Password protection	
Firmware upgrade	HTTP mode, can be upgraded remotely	
Simultaneous connection	Up to 10	
Ethernet	10 / 100 Base-T	
Wireless (option)	802.11b/g (optional)	
Network Protocol	HTTP, TCP/ IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, 3GPP, UPnP	
SD card management		
Recording trigger	Motion Detection, IP check Network status (wire connection only)	
Video format	AVI, JPEG	
Video playback	Yes	
Delete files	Yes	
Power Requirement	DC12V or Power Over Ethernet (IEEE 802, 3af)	
Power Consumption	Lan: 1.7A ; WLAN: 1.9A, 7.8W	
Dimensions	105mm(W) x 157mm(L) x 150mm(H)	
Weight	550g	

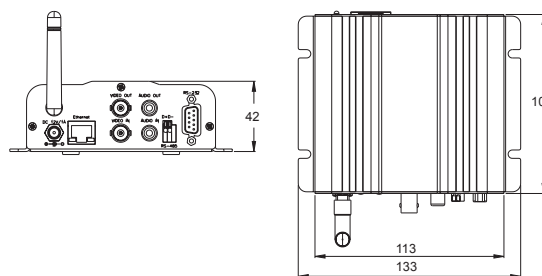▶ Specifications are subjected to change without prior notice.

H.264 One Channel Decoder / Encoder

Key Features

- 1 CH Input/Output
- H.264/ MJPEG/MPEG4 compression
- SD card backup
- way audio
- Support Cell Phone/PDA/3GPP
- 3 Streaming

- Power Over Ethernet available
- SDK for Software Integration
- Wireless
- Free Bundle 36 ch recording software
- ONVIF compliance

Mechanical Dimension

Technical Specifications

Model		EDH-02H (wired) / EDH-02HW (wireless)	
Hardware	CPU	ARM 9, 32 bit RISC	
	RAM	DDR2 256 MB	
	Flash	16 MB	
	Video Input	BNC x 1 (CVBS Camera Input)	
	Video Looping Input	BNC x 1 (CVBS Monitor Output)	
	Audio Input / Out	1 in / 1 out	
	I/O	2 in 2 Relay out (COM. & N.O. & N.C.) Relay Out: DC 24V : 1A AC 110V: 0.5A	
	RS 485	1 for PTZ control	
	RS 232	Yes	
	Power Over Ethernet	POE (optional)	
	Power Consumption	DC 12V, 350mA, 4W	
Network	Ethernet	10/100 Base-T	
	Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP	
	Wire or Wireless	Wired	Wireless (optional)
System	Video Resolution	NTSC - 720x480, 704x480,352x240, 176x120 PAL– 720x576, 704x576, 352x288, 176x144	
	Video adjust	Brightness, Contrast, Saturation, Hue, Sharpness	
	Triple Streaming	H.264/JPEG/MPEG4 (3Gpp)compression	
	Image snapshot	Yes	
	Full screen monitoring	Yes	
	Privacy Mask	Yes, 3 different areas	
	Compression format	H.264/JPEG/MPEG4 (3Gpp only)	
	Video bit rate adjust	CBR, VBR	
	Motion Detection	Yes, 3 different areas	
	Triggered action	Mail, FTP, Save to SD Card , Relay	
	Security	Password protection	
	Pre/ Post alarm	Yes, configurable	
	Firmware upgrade	HTTP mode, can be upgraded remotely	
	Simultaneous connection	Up to 10	
	Audio	2-way	
SD Card Management	Recording Trigger	Motion Detection, IP check, Network break down (wire only),schedule, Alarm	
	Video Format	AVI , JPEG	
	Video Playback	Yes	
	Files Management	Yes, cane be deleted or overwrite	
Web Browsing Requirement	OS	Windows 2000, XP, 2003, Microsoft IE 6.0 or above	
Hardware Suggestion		Intel Dual Core 1.66G,RAM: 1024MB, Graphic card: 128MB Intel-C 2.8G, RAM: 512MB, Graphic card: 64MB	
Dimension		134mm (W) x 42mm (L) x 107mm (D)	

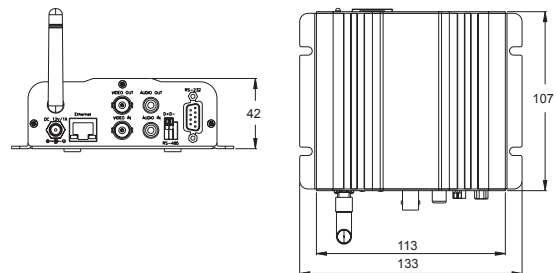▶ Specifications are subjected to change without prior notice.

H.264 One Channel Camera Server

Key Features

- H.264 Compression
- 1 Channel Input
- With SD Back Up for Data Storage
- Support 3Gpp Service
- 3 Streaming H.264/JPEG/MPEG4 (3Gpp)
- Compression

- Built in Power Over Ethernet
- Wired/Wireless available
- Free bundled 36 channel recording software
- SDK For Software Integration
- ONVIF compliance

Mechanical Dimension

Technical Specifications

Model		WB-H811	WB-H811W
Hardware	CPU	ARM 9, 32 bit RISC	
	RAM	DDR2 128MB	
	Flash	8 MB	
	Video Input	BNC x 1	
	Video Looping Input	BNC x 1	
	Audio Input	RCA x 1	
	Audio Output	RCA x 1	
	I/O	2 in 2 Relay out (COM. & N.O. & N.C.) Relay Out: DC 24V: 1A AC 110V: 0.5A	
	RS 485	1 for PTZ control	
	RS 232	Yes	
	Power Over Ethernet	POE (IEEE802.3af)	
	Power Consumption	DC 12V, 350mA, 4W	
Network	Ethernet	10/100 Base-T	
	Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP	
	Wire or Wireless	Wired	Wireless
	Image Frame Rate	30/25 fps (NTSC/PAL)	
System	Video Resolution	NTSC-720x480, 704x480, 352x240, 176x120 PAL-720x576, 704x576, 352x288, 176x144	
	Video adjust	Brightness, Contrast, Saturation, Hue, Sharpness	
	Triple Streaming	H.264/JPEG/MPEG4 (3Gpp) compression	
	Image snapshot	Yes	
	Full screen monitoring	Yes	
	Privacy Mask	Yes, 3 different areas	
	Compression format	H.264/JPEG/MPEG4 (3Gpp) compression	
	Video bit rate adjust	CBR, VBR	
	Motion Detection	Yes, 3 Areas	
	Triggered action	Mail, FTP, Save to SD Card, Relay	
	Security	Password protection	
	Pre/ Post alarm	Yes, configurable	
	Firmware upgrade	HTTP mode, can be upgraded remotely	
	Simultaneous connection	Up to 10	
	Audio	2-way	
SD Card Management	Recording Trigger	Motion Detection, IP check, Network break down (wire only), schedule, Alarm	
	Video Format	AVI, JPEG	
	Video Playback	Yes	
	Files Management	Yes, cane be deleted or overwrite	
Web Browsing Requirement	OS	Windows 2000, XP, 2003, Microsoft IE 6.0 or above	
Hardware Suggestion		Intel Dual Core 1.66G, RAM: 1024MB, Graphic card: 128MB Intel-C 2.8G, RAM: 512MB, Graphic card: 64MB	
Dimension		134mm (W) x 42mm (L) x 107mm (D)	
Certficate		FCC, CE	

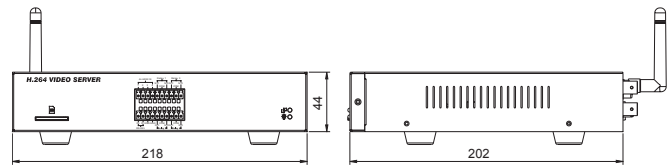▶ Specifications are subjected to change without prior notice.

H.264 Four Channel Camera Server

Key Features

- H.264 Compression
- RS-485 Control (PTZ)
- RS-232 Interface
- Support SD Card
- 2 way audio
- Wired/Wireless available
- 4/Video Input
- 4 Alarm Input
- 4 Relay Out
- Free bundled 36 channel recording software
- SDK For Software Integration
- ONVIF compliance

Mechanical Dimension

Technical Specifications

Model		WB-H814
Hardware	CPU	ARM 9, 32 bit RISC
	RAM	256MB
	ROM	16MB
	Video Input	BNC x 4
	Video Looping Input	BNC x 4
	Audio Input / Output	4 in / 1 out (RCA type)
	Alarm In	4
	Relay Out	4
	RS 485	x 1, for PTZ control
	Power Consumption	DC 12V, 630mA
Network	Ethernet	10/100 Base-T
	Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP
	Wire or Wireless	Wired
		Wireless
	Image Frame Rate	D1 at 20 fps per channel
System	Video Resolution	NTSC-720x480, 704x480, 352x240, 176x120
		PAL-720x576, 704x576, 352x288, 176x144
	Video adjust	Brightness, Contrast, Saturation, Hue
	Dual Streaming	H.264/MJPEG compression
	Image snapshot	Yes
	Full screen monitoring	Yes
	Privacy Mask	1 area per 1 Channel
	Compression format	H.264/MJPEG compression
	Video bit rate adjust	CBR, VBR
	Motion Detection	1 Area per 1 Channel
	Triggered action	Mail, FTP, Save to SD Card , Relay
	Security	Password protection
	Post alarm	Yes
	Firmware upgrade	HTTP mode, can be upgraded remotely
	Simultaneous connection	Up to 10
	Audio	2-way
SD Card Management	Recording Trigger	Motion Detection, IP check, Network break down (wire only),schedule, Alarm
	Video Format	AVI , JPEG
	Video Playback	Yes
	Files Management	Yes, can be deleted or overwrite
Web Browsing Requirement	OS	Windows 2000, XP, 2003, Microsoft IE 6.0 or above
Hardware Suggestion		Intel 2.8G, RAM: 256MB, Graphic Card: 32MB
Dimension		134mm (W) x 42mm (L) x 107mm (D)
Certficate		FCC, CE

▶ Specifications are subjected to change without prior notice.

MPEG4/MJPEG
4 CH Camera Server

WB-8412SD/W

WB-8412

Key Features

- Support VGA, CIF, QCIF
- Quad display up to 30FPS/NTSC, 25FPS/PAL
- Support On-line firmware upgrade
- Support network On-live recording with AVI format which support
- Support dynamic IP, PPPoE via free DDNS ervice
- Support RS-485 to control the speed dome
- SD Back up

- Wired/Wireless Network
- 2 way audio function
- Support 3GPP/PDA service
- Support Maxi-Watch Professional IP software (option).
- Free Bundle Basic 36 Channel Recording Software Provided
- SDK for software integration provided upon customer request

Mechanical Dimension

H.264 VIDEO SERVER
218
44
202

Technical Specifications

Model		WB-8412	WB-8412SD/W
Hardware	CPU	ARM 9, 32 Bit RISC	
	RAM	64MB	
	ROM	8 MB	
	Video In / Out	4 in / 4 out BNC Connector	
	Audio In / Out	1 in / 1 Out	
	I/O	4 in / 1 Out	
	RS 485	1, for PTZ Control	
	Power Consumption	DC12V, 1 A, 4W	
Network	Ethernet	10/100 Base-T	
	Wireless (Optional)	802.11 b/g	
	WEP	64 / 128 Bit	
	Network Protocol	HTTP,TCP/IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP	
	Image Frame Rate	30/25 fps (NTSC/PAL)	
System	Resolution	VGA, CIF, QCIF	
	Image Snapshot	Yes	
	Full Screen Monitoring	Yes	
	Compression Format	MPEG4 / JPEG Selectable	
	Video Bitrate Adjustable	CBR, VBR	
	Motion Detection	4 areas (1 area per Channel)	
	Triggered Action	Mail, FTP, Save to SD storage	
	Pre / Post Alarm	Yes, configurable	
	Security	Password Protection	
	Firmware Upgrade	HTTP Mode which can be upgraded remotely	
	Simultaneous Connection	UP to 10	
	Audio	2 Way Audio	
SD Card Management (WB-8412)	Recording Trigger	Motion Detection, IP Check, Network Break Down (Wire Only)	
	Video Format	AVI, JPEG	
	Video Playback	Yes	
	Files Management	Yes, Can be deleted or over write	
Web Browsing Requirement	OS	Windows 2000, XP, 2003, Microsoft IE6.0 or Above	
	IE	6.0 or above	

▶ Specifications are subjected to change without prior notice.

Maxiwatch Professional
IP Software

● Key Features

- Support up to 64 channels
- Support megapixel IP camera
- Support H.264 compression format
- Triple monitor display
- Support Joystick
- E-map
- Unique GUI recording schedule
- Digital PTZ and multi-view
- Smart detection of 6 events with 10 instant responses
- Counting application
- Intelligent playback system with 5 video analytics searches
- POS and I/O device integration
- Remote live viewer, remote playback, remote backup, remote I/O control and remote desktop configuration
- Supported by Central Management System
- Supports 36 brands of IP cameras and more than 560 models
- Supports 25 languages

● Technical Specifications

Model	Maxi Watch IP Sotware (TCP-XM)				
IP Camera Input(s)	4, 8, 12, 16, 25, 32, 64				
Version	3.2				
IP Camera Brand(s) Supported	FINE Cisco EverFocus Icantek Lorex Panasonic(PSS) Seorim Y-cam	Arecont Digimerge Eyeview IQinvision Lumenera Pixord Sony Zavio	Atlantis D-Link JVC Mobotix Planet Toshiba ACTi Axis	Dynacolor HIKVision LevelOne Moxa Samsung Truen Basler Etrovision	Hitron Linksys Panasonic (PCC) Sanyo Vivotek
Digital PTZ	Supported in Live view and playback				
Multiple Show	Supported in Live view				
Triple Monitor	Enable maximum 64 channels with two screens to show live video and viewer recording video on third monitor.				
Audio & Video Recording	Audio & video recording in synchronization.				
Screen Division	1/4/6/9/10/13/16/25/36/49/64 divided screen.				
Compression Format	MPEG-4; M-JPEG; MxPEG; H.264				
Recording Type	Continuous record, record by digital input, motion record, event recording, record by schedule, manual record				
Playback Channels	Playback Maximum 16 channels under several modes & full screen.				
Playback Control	Playback, backward playback, fast forward/backward playback.				
Auto Recycling Recording	Auto recycling when storage disk is full.				
Available I/O Function	Supporting I/O Box				
Available POS Device	RS232 to Ethernet Convertor				
Hardware Watchdog	N/A				
System Minimum Requirements					
OS Supported	Windows 2000 / Windows XP / Windows 2003/ Windows Vista / Windows 7				
CPU	Pentium 4 – 2.8 GHz				
RAM	512 MB				
HDD	80 GB				
Mother-board	Intel 945 or 965 chip, Intel Chipset recommended				
Display	ATI Radeon 9200, nVIDIA GeForce FX-5200, Intel 945 / 965, or above (ATI recommended)				
Support Language	English, Bulgaria, Chinese (Traditional), Czech, Danish, Farsi, Finland, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norway, Portuguese(Brazil), Portuguese(Portugal), Russian, Slovak, Spanish, Thai, Turkey				

▶ Specifications are subjected to change without prior notice.

● User Interface

Live

Playback

I.E

Remote Software

Maxiwatch Professional
IP Software

Specifications

System, setting, management and integration

- **Open Platform:** Supports over 560 IP cameras, megapixel cameras and video servers from 36 brands of network camera manufacturers; supports H.264, MPEG-4, MJPEG, MxPEG video formats; integrates various systems including point of sale (POS) and I/O device, as well as provides you SDK to integrate access control.
- **Multi-site/Multi-server:** Each NVR server supports up to 64 channels, from IP cameras and video encoders with analog cameras, and can be managed by CMS or remote live view client for centralized management in multi-site projects.
- **Multiple Video Clients:** NVR server can stream video to multiple Remote Live Viewers, web clients and mobile clients simultaneously.
- **Intelligent Video Analytics:** supports 6 types of video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost. Each alarm can trigger up to 10 unique instant notifications.
- **Intelligent PTZ:** Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NVR. Preset points and patrol functions are also available on many camera models.
- **GUI Recording Schedule:** Intuitive GUI recording schedule featuring continuous recording, motion recording and the 6 unique event recording modes. User can define the recording schedule for each camera on a day by day basis.
- **Triple Monitor:** Up to 64 channels of live view video can be displayed per monitor. Monitor 1 and monitor 2 can both display live view video or act as alarm monitor while the 3rd monitor can be used for playback
- **Transcoding:** Record and live display at different frame rate and resolution.
- **Advance E-Map:** Freedom to import custom image file, place the cameras and I/O on the map to indicate where events are getting triggered with a convenient video preview window.
- **User-Friendly Interface:** GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu.
- **Automatic Camera Model Detection:** automatically search for all of the IP cameras in the network (camera must support UPnP protocol). For cameras that don't support UPnP, user can manually insert the IP camera. The auto detection function will help the user to find the brand and model of the camera after specifying its IP address.
- **Counting Application:** intelligent 2-way (in and out) counting of object, people and traffic.
- **User Authority Management:** Support unlimited number of users with detailed and fully customizable user privilege on each user.
- **Network Flow Monitor:** The data streaming bandwidth of each remote client connection to the NVR server can be monitored and blocked if flow rate is too high.
- **Auto Recycle:** Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files.
- **Integration Support:** Open SDK for integration with third-party systems such as access control, automation, burglar alarm, video analytics and others.

Live Display

- **Multi-view:** NVR can duplicate the same live view video onto multiple channels and digitally zone in to see the details of different spots on cloned channels without losing the original live view video.
- **Intelligent PTZ:** Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NVR. Preset points and patrol functions are also available on many camera models.
- **Monitor Resolution:** Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions
- **Advanced E-Map:** Freedom to import custom image file, place the cameras and I/O on the map to indicate where events are getting triggered with a convenient video preview window.
- **Bandwidth Monitor:** Monitor and display the bandwidth usage of individual cameras and remote viewing clients.
- **Two-way Audio:** Listen and record audio from camera's microphone. Talk to IP camera's speaker.

Playback, Search, Export and Secure data

- **Post-Recording Processing:** Search for 5 types of different analytics events, digital PTZ and video enhancement tool are all available in playback.
- **Multi-Channel Playback:** Play up to 16 channels of recorded video simultaneously both locally and remotely.
- **Video Enhancement:** Fine tune the image's visibility, sharpen, brightness, contrast or even grey scale.
- **Intelligent Search:** Search for 5 different special events (general motion, missing object, for eign object, camera occlusion and signal lost) in recorded files with date, time and log file.
- **Video Export:** Take a snapshot of the recording in JPEG/BMP format or export a section of the video in "AVI" and "ASF" format.
- **Backup:** Backup the recording for archiving purposes or backup the recording with an embedded player to watch at a separate location. NVR supports both local and remote back up to local HD, network drive and CD.
- **Log data:** Unusual event, system log, and counting application can export to "xls" or "txt" file
- **Watermark:** Protect for original recording from alternation with our watermark verification tool.
- **DBTool:** Reconstruct, repair or relocate the recordings in local drive, external drive or network drive.

Remote operations

- **Multiple Live View Display:** Streaming live video from multiple servers (NVR, DVR, and NDVR) simultaneously. Dual monitors support with up to 128 channels per monitor (64 channels per monitor in v3.2.0).
- **Multi Playback Channels Display:** Remote playback of 16 channels recording from any one of the servers (NVR, DVR, and NDVR).
- **Intelligent PTZ:** Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NVR. Preset points and patrol functions are also available on many camera models.
- **I/O Event Control:** Easy to use input and output control panel to remotely trigger digital out puts and monitor input status.

- **E-Map:** A map view of where each camera and I/O devices are located with a convenient pre view window.
- **Remote Backup:** Backup the video into .DAT format with a player attached for easy achieve and viewing purposes.
- **Web-browser (client):** Display up to 16 channels of live video stream or 16 channels of playback in I.E. from any single server.
- **PDA Viewer:** Up to 16 channels snapshot or 1 channel live display; PTZ and I/O control.

Extension Service

- **Central Management System:** Ultimate central monitoring solution for grand scale projects and projects with multiple sites. Fully compatible with all servers (NVR, DVR, NDVR and MiniNVR).
- **Remote Desktop Service:** Embedded remote desktop server that will host for any remote desktop clients to remotely configure the NVR software (remote desktop client is installed separately).
- **3GPP Service:** NVR supports mobile devices through 3G network to stream live view video.
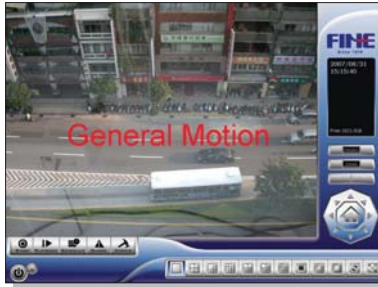
External Device

- **Point of Sale (POS):** Point of Sales system works on NVR by overlaying the trans action text from cash register onto live video channels. All POS recordings are searchable.
- **External I/O capacity:** External I/O box

Smart Guard

- **Smart detection** of 6 camera events, 14 different user-defined POS events, digital input events and 4 system events. The combination of our smart guard events is a powerful tool to combat vandalism and provide a platform for operators to monitor and respond to live events immediately.

Camera Events:	Signal Digital Input Event
· General Motion	System Event:
· Missing Object	· System alarm on Disk Space Exhausted
· Foreign Object	· System alarm on System Health Unusual (CPU temperature)
· Focus Lost	· System alarm on Resource Depleted (CPU loading)
· Camera Occlusion	· System alarm on Network Congestion
· Signal Lost	

- **Instant alarm notification** is the fastest and most cost efficient way to automatically respond to any smart detection event.

  - **1On Screen Display**

· Play Sound	· Send a SMS message
· Send E-mail	· Send to Central Server
· Phone Call	· Send Snapshot to FTP
· PTZ Preset Go	· Popup E-Map on Event
· Signal Digital Output	

Maxiwatch Professional
Video Smart Intelligence

General Motion
Help users to monitor motions and can pinpoints subjects in defined area that detected intruders and trigger alarm

Camera Occlusion
Automatically detects if unidentified personal block cameras lens in an area to deter any vandalism, and alarms activated when any of the cameras is blocked

Missing Object
When an objects has been removed, missing from a detected zone, it will detects and identified to prevent Crime

Foreign Object
It can detects objects such as unidentified suitcase, Baggage appeared in area to help security people to take actions on potentially threat and damages

Lose Focus
When camera has been tore down, blurred pictures occurred for long period, it will show focus lose in the camera channel to alarm the user

Signal Lost
Automatically detects poor signals or signals lost from camera operation under surveillance to create seamless monitoring environment for best management

Counting Application
It can mark up two areas and count objects from in and out direction to monitor flow of movement in detected zone.

Multiple IP Brands Support

H.264 Intelligence DVR Card

Plus Hybrid IP

CP-3004M

CP-3008M

CP-3016M

Key Features

- Support 32CH CIF real-time recording
- H.264 H/W Compression
- Support up to 32 channels
- Support megapixel IP camera
- Triple monitor display
- Support Joystick
- E-map
- Unique GUI recording schedule
- Digital PTZ and multi-view
- Smart detection of 6 events with 10 instant responses
- Counting application
- Intelligent playback system with 5 video analytics searches
- POS and I/O device integration
- Remote live viewer, remote playback, remote backup, remote I/O control and remote desktop configuration
- Supported by Central Management System
- Supports 30 brands of IP cameras and more than 520 models

Technical Specifications

Model	CP-3004M	CP-3008M	CP-3016M
Video Input	4 Cameras	8 Cameras	16 Cameras
Audio Input	4 Channels	8 Channels	16 Channels
Display Rate@D1	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)
Recording Rate @D1	30 fps (NTSC), 25 fps (PAL)	60 fps (NTSC), 50 fps (PAL)	120 fps (NTSC), 100 fps (PAL)
Recording Rate CIF	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)
Video Resolution	NTSC: 176 x 120, 352 x 240, 704 x 480 PAL: 176 x 144, 352 x 288, 704 x 576		
Compression Format	Hardware Compression H.264		
Interface	PCI-e		
Available I/O Box	Support		
Hardware Watchdog	Support		
Hybrid IP	Support Multiple Brands with IP License		
Dimension	167 (W) x 121 (H) mm	167 (W) x 121 (H) mm	216 (W) x 126 (H) mm

▶ Specifications are subjected to change without prior notice.

User Interface

Live

Remote Software

I.E

H.264 Intelligence DVR Card
Real Time D1 Resolution

CP-3004H

CP-3008H

CP-3016H

Plus Hybrid IP

● Key Features

- Support 32CH D1 real-time recording
- H.264 H/W Compression
- Support UP to 32 channels
- Support megapixel IP camera
- Triple monitor display
- Support Joystick
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- Unique GUI recording schedule
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Accessories

POS Box

● Technical Specifications

Model	CP-3004H	CP-3008H	CP-3016H
Video Input	4 Cameras	8 Cameras	16 Cameras
Audio Input	4 Channels	8 Channels	16 Channels
Display Rate@D1	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)
Recording Rate @D1	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)
Video Resolution	NTSC: 176 x 120, 352 x 240, 704 x 480 PAL: 176 x 144, 352 x 288, 704 x 576		
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Available I/O Box	Support		
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Hybrid IP	Support Multiple Brands with IP License		
Dimension	167 (W) x 121 (H) mm	167 (W) x 121 (H) mm	216 (W) x 126 (H) mm

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● User Interface

Live

Remote Software

I.E

POS Box Solution

● Key Features

- Support all FINEST NVR/DVX/NDVR Mini NVR system
- Up to 64 POS system
- Transaction data overlay on multi-channels
- Record Transaction data
- Smart detect and Immediate reaction of pre-defined special keyword of abnormal transaction
- External rule of user defined event – evelop with POS alarm SDK
- POS Event Log search for pre-defined event
- Smart search for special keyword and playback recording video with transaction data
- Microsoft Access format Database of transaction data

Input	RS232
Output	Ethernet
DC In	DC +10V to +15V
Power consumption	500 mA
Operating Temperature	-20 to 65°C
Operating Humidity	0-90 % Non-Condensing
Baud Rate	110 bps to 230.4 kbps
Data Bits	5, 6, 7 or 8
Stop Bits	1, 1.5 or 2
Parity	None, Even, Odd, Mark, Space
Flow Control	None, RTX/CTS, XON/XOFF, DTR/DSR

Specifications

Live Transaction Overlay
- Up to 64 POS or Cash Register
- Transaction video Overlay display on multi associated cameras
- User defined POS OSD setting
- Flexible user defined overlay areas of different associated cameras
- User definition transaction display time.

POS Transaction Filed Filter
- User defined Tag filed filter
- Export/Import Tag filter to/from the other FINEST system
- Six transaction definition tool
  · Omit: Neglect the text of transaction which is meaningless or not important
  · Substitute: Use another word(s) to replace the selected text
  · Add New Line: Define the selected text as a symbol to change a new line
  · Start: Define the selected text as a symbol which means a transaction begins
  · End: Define the selected text as a symbol which means a transaction ends
  · Cash Register Opened: Define the text as a symbol which means the cash register is open
- Unlimited user definition for each filter.

Smart Detection
- Smart detection of 4 POS Event Log
  · Transaction Start: Detect any transaction beginning defined in filter
  · Transaction End: Detect any transaction ending defined in filter
  · Open Cash Register: Detect any cash register opening defined in filter
  · User Defined Condition: Detect up to 10 conditions of special words or numbers which are defined by user for transaction data of each POS device.
  · Connection Lost: The basic function to alarm when network of POS device disconnecting.

- Immediate reaction for POS event detection:
  · On Screen Display
  · Play Sound
  · Send E-mail
  · Phone Call
  · PTZ Preset Go
  · Signal Digital Output
  · Send a SMS message
  · Upload to FTP
  · Popup E-Map

Recording, Playback & Search
- Start recording video when POS event log detected
- Basic search of smart detect POS event log to view recording video of associated camera or export to excel for statistic
- Advanced search POS transaction data for any special texts and overlay on recording video.
- Backup video with POS transaction data and event log.
- Independent period to keep transaction data without recycle with video when disk full
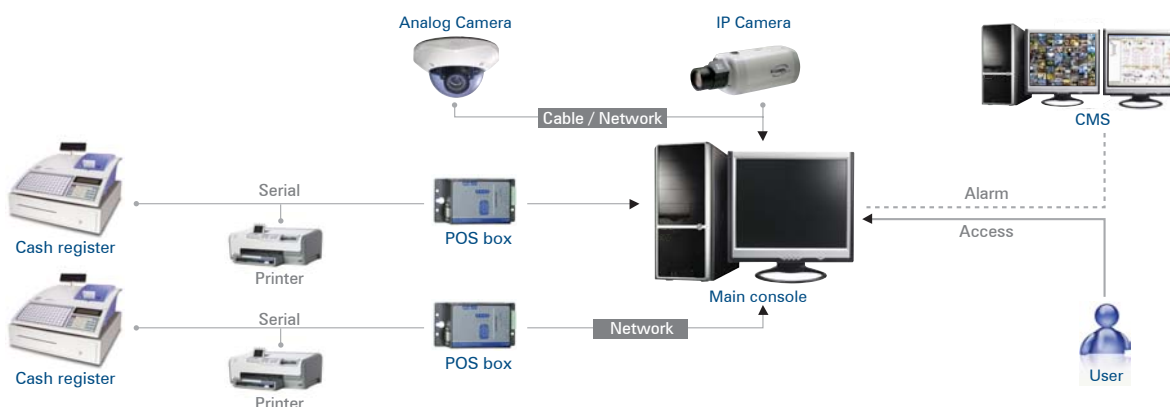
Remote Access
- Remote search transaction data and overlay on recording video
- Remote search POS event log
- Remote backup POS transaction data

Other
- E-Map
- Store all transaction data in Microsoft Access format for retroactive analysis
- Support all FINEST NVR/DVX/NDVR system to extend POS to surveillance solutions System Diagram

System Diagram
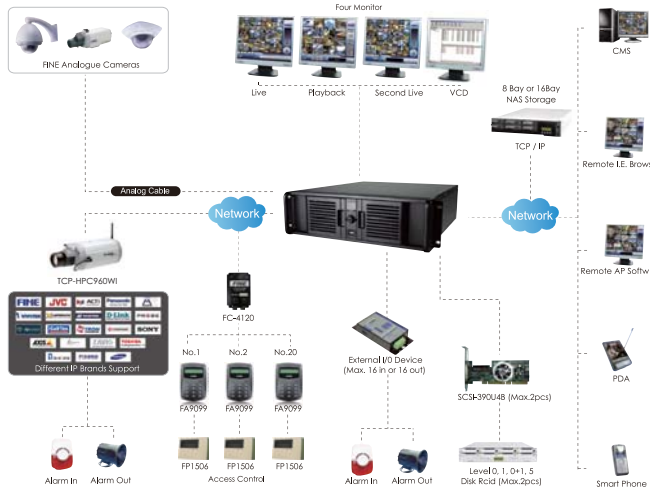
Total Solution CCTV, IP, Access Control + Capture Cards

Access Control System

FA1038	FA-2030	FA-2038	FA-9099
All-in-One Stand-Alone Access Control System(Control Relay Built-in)	Stand Alone Access Control System	Stand Alone Access Control System	Stand Alone Network Access Control System

Features (FA1038)
- Proximity Stand-Alone control System with built-in Relay NC/NO
- Proximity Stand-Alone control System with built-in Relay NC/NO
- Proximity type reader, read range up to 10 cm
- Memory capacity store upto 1,000 user cards
- Antiduress function available
- Access mode selectable reading proximity card card data + personal password or main password
- key in card data
- Force alarm function
- Arm or disarm connected security system
- Alarm activated when wrong password being input more then five times
- FA-1038E (EM) , FA-1038-H (HID) , FA-1038-M (MIFARE)

Features (FA-2030)
- Proximity type reader,read range upto 7cm
- Memory capacity store up to 5000 user records
- Large LCD display
- Access mode selectable
- Anti - duress function available
- Arm or disarm connected security system
- Patrol function available
- Security function available
- User card can be registered / deleted in batch mode
- Last ten history records available
- Audible key tone for easy operate
- Strike , alarm and duress relay drive time selectable (1 - 255 seconds)
- Door left open time selectable (1-255 seconds)
- Two - piece enclosure design the reader is patted for weather and hazard proofing
- A separate relay module design, high security provided
- FA-2030E (EM) , FA-2030-H (HID) , FA-2030-M (MIFARE)

Features (FA-2038)
- Proximity type reader, read range upto 7cm
- Reader is potted for water and dust proofing, makes it a popular choice for both indoor and outdoor installation
  Two – piece enclosure design the reader is patted for weather and hazard proofing
- Memory capacity store upto 1,000 user cards
- Master code function
- Main code function
- Security password function
- Force alarm function
- Key beeper sound selectable
- Drive time of electric lock and alarm relays programmable (1~99 seconds)
- Drive relay board separated from controller, module design, higher safety index
- Anti-duress function available
- Arm or disarm connected security system
- FA-2038E (EM) , FA-2038-H (HID) , FA-2038-M (MIFARE)

Features (FA-9099)
- Proximity type reader,read range upto 10cm
- 9000 card holders/ 9500 transactions
- Network configuration up to 99 devices or 320 devices
- Antipass back
- Access mode available
- Door left open alarm function
- Force entry alarm
- Temporary suspend all function
- Password time zone restraint
- Ten access time zone restrain
- Twelve months holiday restrant
- Communication interface: RS232 - RS485 and TCP/IP available
- Can be used as stand alone device without personal computer connected
- Eight groups personal password time zone programmable pre-define time
- Device model and version number can be displayed
- Up to 2 months battery back-up capacity for data storage during power failure
- With power saver function , the back light of LED turn off once no there is operation within 3 minutes
- Communication baud rate can be programmed via keypad
- Four error message available (all records are stored in controlled software)
  1.Invalid card   2. Restricted Time
  3.Time zone Unmatched   4.Code Unmatched
- FA-9099-E (EM), FA-9099-H (HID), FA-9099-M (MYFARE)

FEC-6016/6032 Lift Control System

Features
- Elevator Controller {16/32 floors}
- Relay Contact NO/NC type selectable
- Relay dry contact by pass mode auto and manual operation selectable
- Suitable for FA-9099

No.1 FA-9099E FE-6016/FEC-6032 Elevator
No.2 FA-9099H FE-6016/FEC-6032 Elevator
Max. 40 sets
No.40 FA-9099M FE-6016/FEC-6032 Elevator
FC-4120C

Total Solution-CCTV, IP, Access Control+Capture Cards

CP-3004M / CP-3004H | CP-3008M / CP-3008H | CP-3016M / CP-3016H

Features
- CP-3004M, CP-3008M, CP-3016M
- Support 32CH CIF real-time recording
- H.264 H/W Compression
- Support up to 32 channels
- Support megapixel IP camera
- Triple monitor display
- Support Joystick
- E-map
- Unique GUI recording schedule
- Digital PTZ and multi-view
- Smart detection of 6 events with 10 instant responses
- Counting application
- Intelligent playback system with 5 video analytics searches
- POS and I/O device integration
- Remote live viewer, remote playback, remote backup, remote I/O control and remote desktop configuration
- Supported by Central Management System
- Supports 30 brands of IP cameras and more than 520 models
- Hybrid function (option)

Features
- CP-3004H, CP-3008H, CP-3016H
- Support 32CH D1 real-time recording
- H.264 H/W Compression
- Support up to 32 channels
- Support megapixel IP camera
- Triple monitor display
- Support Joystick
- E-map
- Unique GUI recording schedule
- Digital PTZ and multi-view
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FINE Analogue Cameras
Four Monitor
Live Playback Second Live VCD
CMS
8 Bay or 16Bay NAS Storage
TCP / IP
Remote I.E. Brow
Analog Cable
Network
Network
Remote AP Softw
TCP-HPC960WI
FC-4120
No.1 No.2 No.20
External I/O Device (Max. 16 in or 16 out)
PDA
Different IP Brands Support
FA9099 FA9099 FA9099
SCSI-390U4B (Max.2pcs)
Alarm In Alarm Out
FP1506 FP1506 FP1506
Access Control
Alarm In Alarm Out
Level 0, 1, 0+1, 5 Disk Rcid (Max.2pcs)
Smart Phone

Total Solution CCTV, IP, Access Control＋Capture Cards

Access Control System

FR-310	FR-310 K	FC-4852C	FC-4120C
Proximity Standard Wiegand Reader	Proximity Standard Wiegand Reader with keypad	RS-485 to RS-232 Converter	TCP/IP Converter

Features (FR-310)
A proximity sub-reader complying with the 26 bits Wieg and format of the international standards. A bicolor (green/red) LED and a beeper offer feedback to users

Features (FR-310 K)
A proximity sub-reader complying with the 26 bits Wieg and format of the international standards. A bicolor (green/red) LED and a beeper offer feedback to users

Features (FC-4852C)
- This communication converter is special for oneline access control devices and computer time recorder to form a network configuration.
- The communication baud rate such as19200 ,9600,4800,2400,1200,600,300,150 BPS can be selected through the DIP Switch. Please reset the device (power off and on again) after new rate selected.
- The maximums connecting access control reader up to 64 units for one of
- FC-4852C, which divided to two RS485 data bus.

Features (FC-4120C)
- Make your serial devices Internet ready
- Versatile socket operation modes, including TCP & REAL COM
- Easy-to-use Windows Utility for mass installation
- Cigarette pack size
- 50bps~ 230.4K bps Ethernet
- 2 wire RS-485 with patented Automatic Data Direction

FR-0312

Relay I/O board , 2DI/3DO (2DI-Door sensor, push button) (3DO-Strike,alarm,-option one)

Cards

FSD-1000	FSD-1000-K	FSD-2000-K	FSD-1000RD
Thin Card, 125KHZ, EM Format	EM Format With Key Chian	Mifare Format With Key Chain	Thick Card, 125KHZ, EM Format (Read Only) (Continuative Number)

FSD-2000	FT-160	FEB-250	FSD-3000
Mifare Iso Card	Series Electronic Strike	Electronic Blot Lock	HID Isoprox II ISO Card

FML-300	FML-600	FSD-3300
Magenetic Lock Wiring Instruction Voltage : 12/24VDC Size : 130x8x32mm Weight 0.9 kgs	Magnetic Lock Wiring Instruction Voltage : 12/24VDC Size : 232x48x25mm Weight 1.5 kgs	HID Clamshell Card (26BIT)

DVX-9000HC Series
H.264 PC-Based DVR

Hybrid and Real Time Full Scale DVR

● Key Characteristics

- D1 (704 x 576) Hardware Compression H.264 Encoding
- Real Time Live Surveillance
- Real Time Audio and Video Recording
- Full Screen, 1 / 4 / 6 / 9 / 10 / 16 Split-Screen Display
- Agility Motion Detection Support
- Support TCP/IP, PPPoE and DHCP
- Support NAS or USB external storage
- SATA or IDE interface HDD, CD-RW or DVD-RW back up support
- Remote viewing and remote playback via software
- Operation systems is Windows XP / 2003

● Technical Specifications

Model	DVX-9004HC	DVX-9008HC	DVX-9016HC	DVX-9032HC
Video Input	4	8	16	32
Audio Input	4	8	16	32
Sensor Input / Relay Output	4 in / 4 Out or 16 in / 16 Out			
Compression Standard	H.264			
VGA Output	32 Bit True Color			
Display Rate@D1	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)	960 fps (NTSC), 800 fps (PAL)
Recording Rate @D1	30 fps (NTSC), 25 fps (PAL)	60 fps (NTSC), 50 fps (PAL)	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC) 200 fps (PAL)
Recording Rate CIF	120 fps (NTSC), 100 fps (PAL)	240 fps (NTSC), 200 fps (PAL)	480 fps (NTSC), 400 fps (PAL)	960 fps (NTSC) 800 fps (PAL)
Video Resolution	NTSC: 176 x 120, 352 x 240, 704 x 480 PAL: 176 x 144, 352 x 288, 704 x 576			
Compression Format	Hardware Compression H.264			
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese			
Redundant Power Supply	100V ~ 240VAC Auto Switch			
Size	427cm(L) x 528.5cm (W) x 132.6mm (H)			

● Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera L Frutiger Light

Web-browser (client)
Display up to 64 channels of live video stream or 16 channels of playback in I.E.

Triple Monitor
Up to 64 channels of live view video can be displayed per monitor. Monitor 1 and monitor 2 can both display live view video or act as alarm monitor while the 3rd monitor can be used for playback

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic
Auto Recycle: Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
- On Screen Display
- Play Sound
- Send E-mail
- Phone Call
- PTZ Preset Go
- Signal Digital Output
- Send a SMS message
- Send to Central Server
- Send Snapshot to FTP
- Popup E-Map on Event

● Application Diagram

Triple Monitor

FINE Analogue Cameras

Analog Cable

Internet

Live | Playback | Second Live

8 Bay or 16Bay NAS Storage

TCP / IP

Internet

CMS

Remote I.E. Browser

Remote AP Software

PDA

Smart Phone

Different IP Brands Support

Alarm In | Alarm Out

External I/0 Device (Max. 16 in or 16 out)

SCSI-390U4B (Max.2pcs)

Alarm In | Alarm Out

Level 0, 1, 0+1, 5 Disk Rcid (Max.2pcs)

DVX-9000HD Series
H.264 Full D1 Real Time DVR

Key Characteristics

- Support 32CH D1 real-time recording
- H.264 Hardware Compression
- Multiple and configurable channels display on CCTV monitor
- 6 smart detections & 10 instant responses
- Multifunction playback with intelligent search
- E-map and GUI recording schedule
- POS and I/O device integration
- Triple monitor display for SPOT monitor and Dual Monitor
- Remote live viewer, playback, backup, I/O control, desktop configuration
- Digital PTZ and multiple viewer
- Synchronized with joystick
- Built-in DVD-RW support backup on DVD/CD directly
- Up to 64 sensors in / relay output
- Support up to 5 HDDs inside
- Support 22 languages

Technical Specifications

Model	DVX-9004HD	DVX-9008HD	DVX-9016HD	DVX-9032HD
Video Input	4	8	16	32
Audio Input	4	8	16	32
Sensor Input / Relay Output	4 in / 4 out or 16 in / 16 out			
Compression Standard	H.264			
VGA Output	32 Bit True Color			
Live Display Frame	120 fps	240 fps	480 fps	960 fps
Video Recording Frame	120 fps	240 fps	480 fps	960 fps
Video Resolution	NTSC: 176 x 120(CIF), 352 x 240(VGA), 704 x 480(D1) PAL: 176 x 144(CIF), 352 x 288(VGA), 704 x 576(D1)			
Communication Protocol	TCP/IP, DHCP, PPPoE			
Backup Function	Internal SATA hard disk SCSI / USB interface HDD / CDRW / DVD-RW			
Language	English / Chinese / France / Germany / RussianSpain / Greek / Italian / Portuguese			
Redundant Power Supply	100V~240VAC, 500W Auto Switch			
Size	53cm(L) x 48.3cm(W) x 13.2cm(H)			

Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
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Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
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3G Service
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Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic
Auto Recycle: Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
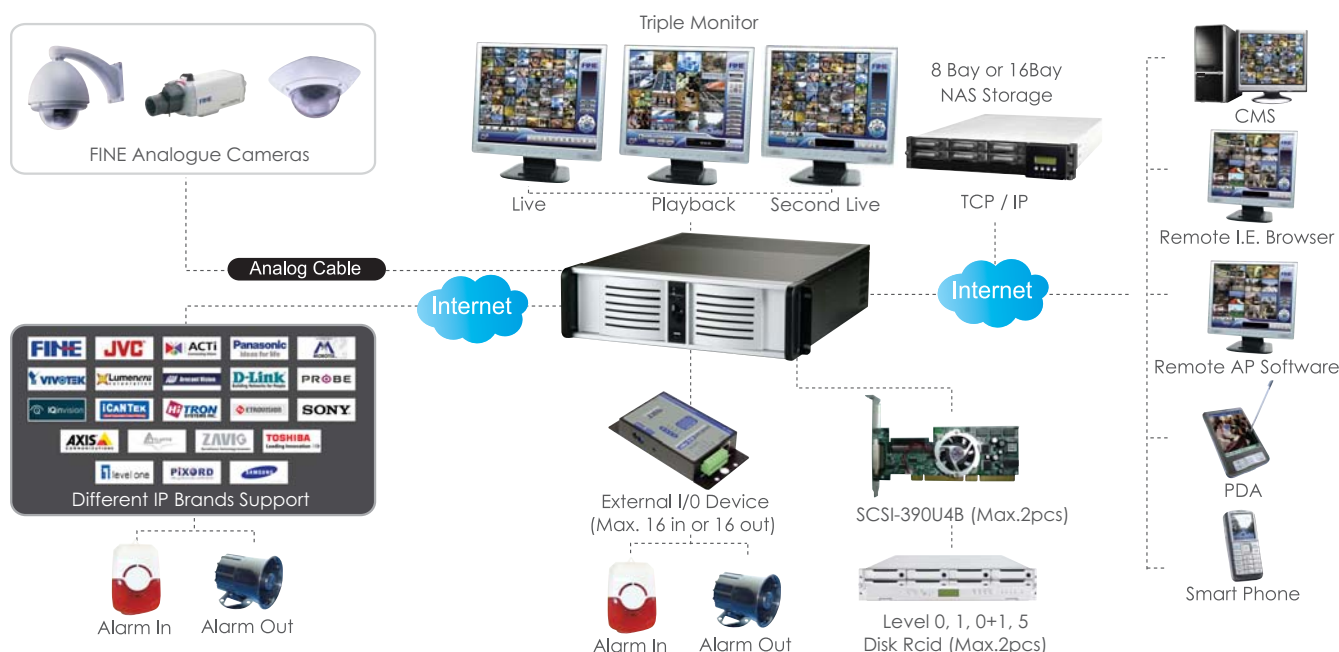Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

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Application Diagram

FINE Analogue Cameras

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Live   Playback   Second Live

8 Bay or 16Bay NAS Storage

TCP / IP

CMS

Remote I.E. Browser

Remote AP Software

PDA

Smart Phone

Analog Cable

Internet

Internet

Different IP Brands Support

External I/0 Device (Max. 16 in or 16 out)

SCSI-390U4B (Max.2pcs)

Level 0, 1, 0+1, 5 Disk Rcid (Max.2pcs)

Alarm In   Alarm Out

Alarm In   Alarm Out

4 / 8 / 16 Channel NAS Mini Linux NVR

NAS-E1040

NAS-E1080 / NAS-E1016

● Key Characteristics

- Linux Embedded – Free from PC crash and virus attack
- Server-Client Architecture
- Web-based management (Recommend on IE7 or above)
- Easy installation
- Manage 2 / 4 / 8 / 16 IP cameras
- Online GUI recording schedule
- RAID 0,1,5,5+spare and 10, prevention of data loss
- Support 25 brands of IP cameras and 735 models
- Support ImmerVision lens
- Support Megapixel camera and H.264 compression format
- Support D1, real-time and audio recording
- Up to 128 channels live display on multiple monitors
- Multiple camera streams to display in LiveView
- Support E-map with device indicator
- Playback system with 5 intelligent search
- Support Point of Sale (POS)
- 2/4 SATA HDD bays Embedded
- External storage – Up to 16TB total recording space
- Recording without PC turning on
- Remote I/O solution and camera I/O integration
- Supported by FINE CMS
- upported by iPhone iViewer

● Technical Specifications

Model	NAS-E1040	NAS-E1080	NAS-E1016
Recording Cameras	1~4	1~8	/ 1~16
Playback channels	4	8	/ 16
Number of Drives	2xSATA II	4xSATA II	4xSATA II
Max Storage of Compatible HDD	2TB	2TB	2TB
RAID Level	RAID 0,1	RAID 0, 1, 5, 10	RAID 0, 1, 5, 10
I/O Interface	1xUSB 2.0 (for UPS)	2xUSB 2.0 (for UPS); 1xeSATA (for external storage[2]: DAS)	2xUSB 2.0 (for UPS); 1xeSATA (for external storage[3]: DAS)
LAN Transmission Speed		10/100/1000 Mbps (RJ45)	
Voltage	100-240V	100-230V	100-230V
Power Consumption	39W	72W	72W
Device Dimension	92.0 x 145.2 x 213.2 mm	188.2 x 152.5 x 229.6 mm	188.2 x 152.5 x 229.6 mm
Device Weight (without drive)	1.0 kg (2.2lbs)	2.5 kg (5.5lbs)	2.5 kg (5.5lbs)
Temperature		Operating: 5°C to 35°C (±5°C)	
Humidity		Operating: 10%-85%	
Supported IP Camera Brand(s): 25 brands	FINE, Axis , Panasonic, SONY, Vivotek, Acti, Arecont Vision, SANYO, Basler, Brickcom, CISCO, CNB, DLINK, ENEO, Hikvision, IQinVision, Levelone, Linksys, Lumenera, Mobotix, Samsung, SANTEC, StarDot, Toshiba, Videosec, ZAVIO		
Compression Format	MPEG4, M-JPEG, H.264, MxPEG (depends on IP camera)		
Recording Performance	Around 60fps at 1.3M Total bitrate: 20Mbps	Around 160fps at 1.3M Total bitate: 65 / 55Mbps	Around 160fps at 1.3M Total bitate: 65 / 55Mbps
Recording Type	Continuous record, Record by schedule, Event trigger record, Digital input trigger record		
Remote Live View Control	Liveview, PTZ control, Patrol/Focus, Preset set/go, Auto Scan, Snapshot		
Audio & Video Recording	Audio and video recording in synchronization		
POS	Liveview, record and search for every transaction		
Auto Backup	Automatically backup the recorded video of the date before to FTP server		
Intelligent Search	General motion, Missing object, Foreign object, Lose focus, Camera occlusion		
Remote Live View Connection	Live view maximum 16 connections at the same time		
Supported Language	English, Japanese, Traditional Chinese, Spanish, Deutsch, French, Italian, Russian, Czech, Korean, Polish, Dutch, Swedish, Portuguese (Brazil)		

System Minimum Requirement

Model	NAS-E1040	NAS-E1080	NAS-E1016
OS		Windows XP / 2003 / Vista / Win7	
CPU		Intel Core 2 Duo, 2.6GHz	
RAM		1GB	
LAN Transmission Speed		10/100/1000 Mbps (RJ45)	
UI		1. Web browser: Internet Explorer 7 or 8 2. Client Application Program 3. iPhone iViewer	

▶ Specifications are subjected to change without prior notice.

4 / 8 / 16 Channel NAS Mini Linux NVR

● Technical Details

System, Setting, Management and Integration

Server-Client Architecture
Centralizes all video data transaction only via NAS NVR to remote clients. With this centralized structure, total camera loading remain the same level, thus ensure good recording quality even with maximum of remote client access.

Open Platform
Supports 735 IP cameras and video servers (encoders) from 25 brands of major network camera manufacturers.

Automatic Camera Model Detection
NAS NVR can automatically search for IP cameras in the network (camera should support UPnP protocol or should be implemented its search tool). For those unsearchable cameras, user can manually insert it. The auto detection function will help the user to find the brand and model of the camera after specifying its IP address.

Storage Optimization
NAS NVR supports H.264 compression format increasing the storage capacity to nearly 600% of MJPEG and 150% of MPEG4.

Friendly GUI Recording Scheduler
Graphical user interface to setup recording schedule featuring unique day mode and week mode.

Event & Action
4 camera events including motion detection (if the camera has it), connection lost and camera input; 1 input event from remote I/O box; 3 system events and daily system report through E-mail; 3 instant alarm responses supporting output, E-mail and CMS alarm system.

Online RAID Capacity Expansion and Level Migration
Support RAID 0,1,5,5+ spare and 10 for maximum capacity or data protection at the HDD level.

Point of Sale (POS)
POS text overlay on live view video and recordings. All recorded POS transactions are searchable in the NAS NVR database.

Remote I/O
With the integration of camera I/O and FINE I/O Box, system can start recording when input triggered, or trigger output as an event happened.

The authorities of different kinds of users
Web Viewer logins to the NAS Server via 4 different user groups: administrator, power user, user, and guest. Each user group has its own distinctive privilege in system configuration, live view camera and playback camera.

Log System
Hardware log keeps track of system operation; NVR log for camera status and user access; NVR event Log for special events.

Remote Operation

Multiple Live View Channel
Up to 16 channels per in web client and 64 channels in Remote Live Viewer client (up to 128 channels on multiple monitors). In addition, Remote Live Viewer client can access and display live video from any FINE servers (NAS NVR, DVX Series, NVR-2U Series) simultaneously.

Multiple Playback Channel
Up to 16 channels in web playback client/ Playback System.

Multi-View
NAS NVR can duplicate the same live view video onto multiple channels and digitally zone in to see the details of different spots on cloned channels without losing the original live view video.

Stream Profile
Live display multiple camera streams with lower bitrate, while still having good quality recorded videos.

Intelligent PTZ
Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NAS NVR. Preset points and patrol functions are also available on many camera models.

I/O Event Control
Control I/O for event detection, instant action and digital output.

E-Map
Show device indicator on map for easily find and track device location. Furthermore, pop up map to point out the device when an event occurred.

Playback, Search, Export and Secure Data

Post-Recording Processing
Intelligent search, digital PTZ and video enhancement tool.

Intelligent Search
Search recorded video for 5 events including general motion, foreign object, missing object, loss focus and camera occlusion.

Video Enhancement
Fine tune the image's visibility, sharpen, brightness, contrast or even grey scale.

Evidence Export
Snapshot and print video image in BMP/ JPEG; backup video in DAT; save video in ASF/AVI.

Action Alert: Notify users on camera and system event through sound, digital output, E-mail and FINE CMS alert.

Auto Backup
Automatically backup the recorded video of the date before to a designated FTP server.

Manual Backup
Manual backup or delete recordings of any NAS NVR.

Watermark: Protect for original recording from alternation with our watermark verification tool.

Extended Service

FINE Central Management System (CMS)
Ultimate central monitoring solution for grand scale projects and projects with multiple sites. Fully compatible with all FINE servers (NAS NVR, DVX Series, NVR-2U Series)

External device

POS BOX
FINE Point of Sales system works on NAS NVR by overlaying the transaction text from cash register or ATM machines onto live video channels. All POS recordings are searchable.

Remote I/O Box
I/O signals of I/O Box are converted to Ethernet through converter, which enables NAS NVR to do more sophisticated application, such as starting recording when input triggered, triggering output as an event happened, and much more.

ImmerVision Lens
PTZ mode, Quad mode and Perimeter mode are supported on liveview and playback. Please refer to ImmerVision's website for qualified cameras.

APC UPS
Continues to feed the NAS NVR power at an event of power outage.

DAS
The total recording space can be up to 16TB by connecting DAS with NAS-E1080 & NAS-E1016

NVR-2U4S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

● Key Features

- Record up to 4 audio/video streams
- Record up to 120fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

● Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
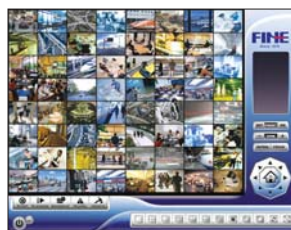- On Screen Display
- Play Sound
- Send E-mail
- Phone Call
- PTZ Preset Go
- Signal Digital Output
- Send a SMS message
- Send to Central Server
- Send Snapshot to FTP
- Popup E-Map on Event

● Technical Specifications

Model	NVR-2U4S
No. of IP Cameras	4
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264 , MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Live display	True real-time 30fps(N) per channel , 25fps(P) per channel VGA resolution display
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion , Missing object , camera occlusion , foreign object , signal lost , focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW),4TB 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.

● User Interface

Live

Playback

I.E

Remote Software

NVR-2U8S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

● Key Features

- Record up to 8 audio/video streams
- Record up to 240 fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

● Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
- ・ On Screen Display
- ・ Play Sound
- ・ Send E-mail
- ・ Phone Call
- ・ PTZ Preset Go
- ・ Signal Digital Output
- ・ Send a SMS message
- ・ Send to Central Server
- ・ Send Snapshot to FTP
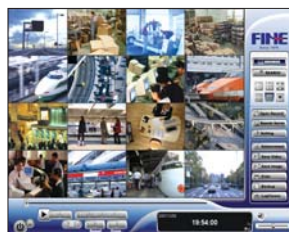- ・ Popup E-Map on Event

● Technical Specifications

Model	NVR-2U8S
No. of IP Cameras	8
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264 , MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Live display	True real-time 30fps(N) per channel , 25fps(P) per channel / VGA resolution display
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion , Missing object , camera occlusion , foreign object , signal lost , focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW),4TB / 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.

● User Interface

Live

Playback

I.E

Remote Software

NVR-2U12S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

Key Features

- Record up to 12 audio/video streams
- Record up to 360 fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
- · On Screen Display
- · Play Sound
- · Send E-mail
- · Phone Call
- · PTZ Preset Go
- · Signal Digital Output
- · Send a SMS message
- · Send to Central Server
- · Send Snapshot to FTP
- · Popup E-Map on Event

Technical Specifications

Model	NVR-2U12S
No. of IP Cameras	12
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264 , MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Live display	True real-time 30fps(N) per channel , 25fps(P) per channel VGA resolution display
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion, Missing object, camera occlusion, foreign object, signal lost, focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW), 4TB 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.

User Interface

Live   Playback   I.E   Remote Software

NVR-2U16S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

Key Features

- Record up to 16 audio/video streams
- Record up to 480 fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
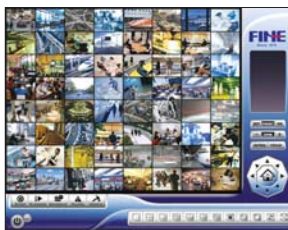- On Screen Display
- Play Sound
- Send E-mail
- Phone Call
- PTZ Preset Go
- Signal Digital Output
- Send a SMS message
- Send to Central Server
- Send Snapshot to FTP
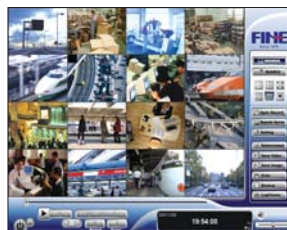- Popup E-Map on Event

Technical Specifications

Model	NVR-2U16S
No. of IP Cameras	16
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264, MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Live display	True real-time 30fps(N) per channel , 25fps(P) per channel
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion, Missing object, camera occlusion, foreign object, signal lost, focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW), 4TB 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.

User Interface

Live   Playback   I.E   Remote Software

NVR-2U25S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

Key Features

- Record up to 25 audio/video streams
- Record up to 120fps, 240 fps, 480 fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
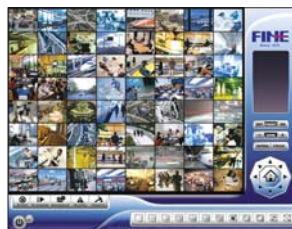· On Screen Display
· Play Sound
· Send E-mail
· Phone Call
· PTZ Preset Go
· Signal Digital Output
· Send a SMS message
· Send to Central Server
· Send Snapshot to FTP
· Popup E-Map on Event

Technical Specifications

Model	NVR-2U25S
No. of IP Cameras	25
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264 , MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion, Missing object, camera occlusion, foreign object, signal lost, focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW), 4TB 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.

User Interface
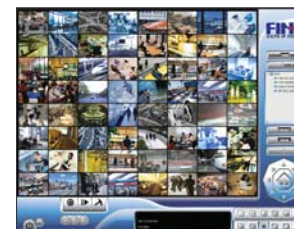
Live   Playback   I.E   Remote Software

NVR-2U32S Professional 2U Rackmount Network Video Recorder With Maxi Watch Software

Key Features

- Record up to 32 audio/video streams
- Record up to 120fps, 240 fps, 480 fps at full D1 resolution
- PC Industrial Computing Rack mount 2U
- H.264 , MPEG-4/JPEG dual codec depend on the camera compression
- Support external RAID 5, NAS connection, USB storage
- AP Client Remote View Software, and I.E. Browser
- Support different IP Camera Brands
- Disk on Module Utility with Greater stability

Software Specifications

Intelligent Video Analytics
Support video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost

GUI Recording Schedule
Intuitive GUI recording schedule featuring continuous recording, motion recording. User can easily define the recording schedule for each camera

Web-browser (client)
Display up to 16 channels of live video stream or 16 channels of playback in I.E.

Dual Monitor
Up to 64 channels of live view video can be displayed per monitor.

Bandwidth Monitor
Monitor and display the bandwidth usage of individual cameras and remote viewing clients.

E-Map Function
For easy locating the triggered alarm of cameras and I/O on the map

3G Service
Support mobile device through 3G network via PDA viewer in the package

User-Friendly Interface
GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu

Counting Application
Intelligent 2-way (in and out) counting of object, people and traffic

Auto Recycle
Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files

Monitor Resolution
Supports 1024x768, 1200x900, 1280x1024, and 1600x1200 screen resolutions

Watermark
Protect for original recording from alternation with our watermark verification tool

Instant alarm notification
is the fastest and most cost efficient way to automatically respond to any smart detection event.- 10 automatic instant alarm responses:
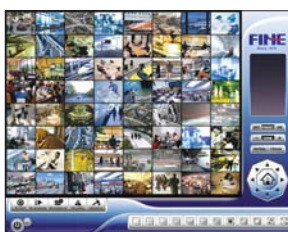- ・On Screen Display
- ・Play Sound
- ・Send E-mail
- ・Phone Call
- ・PTZ Preset Go
- ・Signal Digital Output
- ・Send a SMS message
- ・Send to Central Server
- ・Send Snapshot to FTP
- ・Popup E-Map on Event

Technical Specifications

Model	NVR-2U32S
No. of IP Cameras	32
Video Resolution	Megapixel / Full D1 / CIF/ QCIF /
Compression Standard	H.264 , MPEG4/JPEG
Communication Protocols	TCP / IP, DHCP, PPPOE
Video Encryption	Yes
Operation System	Windows XP / Windows 2003 Server / Windows Vista / Windows 7
USB Joystick	Compatible with AXIS Keyboard
Back Up Function	SCSI / USB Interface HDD / CDR-W / DVD-RW
Bandwidth Control	Automatic (Automatic Transmission Control)
Max. Remote Users	10 simultaneously
Protocol Support	Simultaneously TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP, RTP/RTCP, RTSP, RTP/UDP, IGMP
Digital zoom	Maximum 25 X digital
Smart intelligence	Motion detection General motion, Missing object , camera occlusion, foreign object, signal lost, focus lose
Network Type	RJ 45 (10/100/1000 Base-T)
Internal IDE or SATA Hard Disk	Max. Up to 4HDD (without DVD-RW), 4TB 2HDD + DVD-RW
Language	English / Traditional Chinese / France / Germany / Russian / Spain / Greek / Italian / Portuguese
Redundant Power Supply	Power Supply 100V ~ 240VAC Auto Switch, 400W
Dimension	53cm(L) x 8.6cm(H) x 48.3cm(W)
Operating Temperature	0 ~ +40° C
Storage Temperature	-20° C ~ +60° C

▶ Specifications are subjected to change without prior notice.
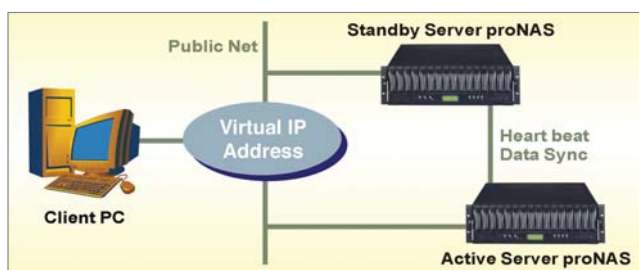
User Interface

Live

Playback

I.E

Remote Software

External NAS Storage 16 Bay

Key Features

- Configurable to 19" rack-mountable 3U chassis
- Supports up to Sixteen (16) 1" hot-swappable SATA II hard drives
- Supports Tape / DAT backup / restore
- Supports RAID levels 0, 1, 0+1, 3, 5, 6 and JBOD
- Smart-function LCD panel for RAID setting & ENC status
- Supports hot spare and automatic hot rebuild.
- Allows online capacity expansion within the enclosure
- Two Gigabit Ethernet ports
- Linux-based embedded system (128MB Disk on Module)
- Centralization of Data and Storage Management
- Using Market-Leading Java Technology
- Latest volume snapshot technology
- Apply volume replication to enhance data protection
- Support logical volume over 2TB
- Data Backup via backup plan and scheduling
- Enhance system configuration backup
- Local and external account management
- Large account import
- Share management and permission
- Advance ACL setting for project share
- Support Internet Gateway function
- Online expansion file system
- Support E-mail notification and system log information
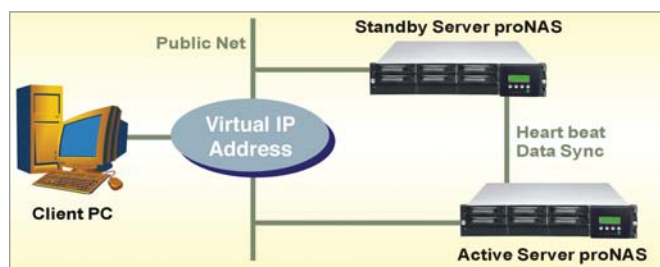- Multi application support via proFamily

Technical Specifications

OT-R3163H-NS	
Hardware Platform	Macintosh Support
Intel Quad Core Xeon 2.0G or above, single / dual Processor	AFP over Apple Talk
Cache memory°G1GB DDR2-533 FBDIMM up to 16GB	AFP over TCP/IP
Two Gigabit Ethernet ports	Mac zones
Up to Sixteen 1" hot-swappable SATA II (3Gb/s, NCQ support) hard drives	General
Real time drive activity and status indicators	File Server Independent
Environmental monitoring unit	Peer-to-peer operation
Three(3) 460W hot-swap power supplies with PFC	Localized language support
Expansion PCI slot for H/W upgrade	Supports NIC / trunking / load balance / fail over
External SCSI for Tape backup	Support UPS management
RAID Controller	System Management
Intel 80321 64 bit RISC	Automatic IP address configuration
RAID level RAID 0, 1, 0+1, 3, 5 , 6 and JBOD	Self-contained unit - no extras neededManagement through Web browser
Supports 128MB up to 1GB of cache ECC unbuffered	Flash upgradeable unit
Supports hot spare and automatic hot rebuild	Supports Microsoft ADS / PDC and Unix NIS accounts import
Allows online capacity expansion within the enclosure	SNMP / MRTG management and notification
Built-in serial port interface for remote event notification	Fail-free online firmware upgrade
Local audible event notification alarm	Unicode support
Storage Management	Multi-node Management GUI
Volume Management	CLI management via Telnet or SSH
Disk usage statistics	Data Protection
Hot spare capability	proNAS High Availabiltiy (option)
Volume Snapshot	proBackup Client Backup
Volume Replication	proNAS Data and Configuration Backup
Connectivity	Support Veritas BackupExec Agent
SMB, CIFS over TCP/IP	Power requirements
NFS over UDP/IP	AC 90V ~ 264V Full range
Cross platform data access	16A ~ 8A, 47~63Hz
Novell Netware support	Physical Dimension
FTP, HTTP file transfer	133(H) x 482(W) x 740(D) mm
DHCP	
NAT	
Internet gateway	
WINS Server	
Unit acts as a DHCP server	
Unit acts as a master browser	
Share level security	
File level security	
User ID security for NFS	

▶ Specifications are subjected to change without prior notice.

External NAS Storage 8 Bay

● Key Features

- Configurable to 19" rack-mountable 3U chassis
- Supports up to Sixteen (16) 1" hot-swappable SATA II hard drives
- Supports Tape / DAT backup / restore
- Supports RAID levels 0, 1, 0+1, 3, 5, 6 and JBOD
- Smart-function LCD panel for RAID setting & ENC status
- Supports hot spare and automatic hot rebuild.
- Allows online capacity expansion within the enclosure
- Two Gigabit Ethernet ports
- Linux-based embedded system (128MB Disk on Module)
- Centralization of Data and Storage Management
- Using Market-Leading Java Technology
- Latest volume snapshot technology
- Apply volume replication to enhance data protection
- Support logical volume over 2TB
- Data Backup via backup plan and scheduling
- Enhance system configuration backup
- Local and external account management
- Large account import
- Share management and permission
- Advance ACL setting for project share
- Support Internet Gateway function
- Online expansion file system
- Support E-mail notification and system log information
- Multi application support via proFamily

● Technical Specifications

Model	OT-R8903H-NS
Hardware Platform	Unit acts as a master browser
Intel Quad Core Xeon 2.0G or above, single / dual Processor	Share level security
Cache memory	
1GB DDR2-533 FBDIMM up to 16GB	File level security
Two Gigabit Ethernet ports	User ID security for NFS
Up to Eight 1" hot-swappable SATA II (3Gb/s, NCQ support) hard drives	Macintosh Support
Real time drive activity and status indicator	AFP over Apple Talk
Environmental monitoring unit	AFP over TCP/IP
Two(2) 500W hot-swap power supplies with PFC	Mac zones
Expansion PCI slot for H/W upgrade	General
External SCSI for Tape backup	File Server Independent
RAID Controller	Peer-to-peer operation
Intel 80321 64 bit RISC	Localized language support
RAID level RAID 0, 1, 0+1, 3, 5, 6 and JBOD	Supports NIC/ trunking / load balance / fail over
Supports 128MB up to 1GB of cache ECC unbuffered	Support UPS management
Supports hot spare and automatic hot rebuild	System Management
Allows online capacity expansion within the enclosure	Automatic IP address configuration
Built-in serial port interface for remote event notification	Self-contained unit - no extras needed
Local audible event notification alarm	Management through Web browser
Storage Management	Flash upgradeable unit
Volume Management	Supports Microsoft ADS / PDC and Unix NIS accounts import
Disk usage statistics	SNMP / MRTG management and notification
Hot spare capability	Fail-free online firmware upgrade
Volume Snapshot	Unicode support
Volume Replication	Multi-node Management GUI
Connectivity	CLI management via Telnet or SSH
SMB, CIFS over TCP/IP	Data Protection
NFS over UDP/IP	proNAS High Availabiltiy (option)
Cross platform data access	proBackup Client Backup
Novell Netware support	proNAS Data and Configuration Backup
FTP, HTTP file transfer	Support Veritas BackupExec Agent
DHCP	Power requirements
NAT	AC 90V ~ 264V Full range
Internet gateway	8A ~ 4A , 47 ~ 63Hz
WINS Server	Physical Dimension
Unit acts as a DHCP server	88(H) x 482(W) x 740(D) mm

▶ Specifications are subjected to change without prior notice.

External SCSI Storage 16 Bay

Key Features

- Supports RAID levels 0, 1, 0+1, 3, 5, 6 and JBOD.
- Supports hot spare and automatic hot rebuild.
- Allows online capacity expansion within the enclosure.
- Local audible event notification alarm.
- Supports password protection and UPS connection.
- Built-in serial port interface for remote event notification.
- Dual host channels support clustering technology.
- The RAID subsystem is made by aluminum
  Aluminum is an excellent thermal conductor and Aluminum offers a unique ombination of light weight and high strength.
- Tagged command queuing for 256 commands, allows for overlapping data streams.
- Transparent data protection for all popular operating systems.
- RAID ADG provides the highest level of data protection.
- RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss.
- Supports multiple array enclosures per host connection.

RAID Management

- Smart-function LCD panel.
- Environmental monitoring unit .
- Real time drive activity and status indicators.
- Browser-based GUI management utility.

SHighest Density Available
- 3U chassis with 16 bays carriers.
- Over 4 Terabytes per chassis.

Extraordinary fault tolerance
- Advanced Data Guarding technology (RAID ADG) provides the highest level of data protection.
- RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss.

Unparalleled Aluminum material
- Aluminum is an Excellent Thermal Conductor.
- Aluminum Exhibits HighStrength-to-Weight Ratio.

Extraordinary performance
- Serial ATA II: The Next Generation Internal Storage Interconnect.
- Better connectivity, higher data transfer rates.

Technical Specifications

Model	OT-R3163-SA
Form-factor	3U 19-inch rackmount chassis
RAID processor	Intel 80321 64 bit RISC
RAID Level	0, 1, 0+1, 3, 5, 6, JBOD
Cache memory	128MB ~ 1024MB
No. of channels (host+drive)	2 + 16
Host bus interface	Ultra 320 LVD
Drive bus interface	SATA II
Data transfer rate	Up to 320MB/Sec
Back plane board	SATA II
Hot-swap drive trays	Sixteen (16) 1-inch trays
Hot-swappable power supplies	Three (3) 300W power supplies w / PFC
Cooling fans	2 (blower)
Battery backup	Option
Fibre Hub	No
R-Link support	Yes
SNMP Protocol Support	Yes
Background RAID Initialization	Yes
S.M.A.R.T	Yes
Array roaming	Yes
Power requirements	AC 90V ~ 254V Full Range 12A / 6A at 110V / 220V, 50Hz / 60Hz
Environmental	
Relative Humidity	10% ~ 85% Non-condensing
Operating Temp	10°C ~ 40°C (50°F ~ 104°F)
Physical Dimensions	133(H) x 482(W) x 609(D) mm 5.24(H) x 18.98(W) x 23.98(D) inches
Weight	20.5kgs / 45.1Lbs (without drives)

Function:
*New disk auto spare *Host independent *Environment monitor *Online expansion *Continuous rebuild *Online consistency check *Failed drive auto rebuild *Failed drive indicators *Audible alarm *Password protection *UPS connection *Bad block auto-remapping *Multiple RAID selection *Online RAID level migration *E-mail Notification

▶ Specifications are subjected to change without prior notice.

Peripherals

GPIO Module

● Technical Specifications

Model	CP-SIO44
Input Channel	4 digital input channel
Output Channel	4 digital output channel
Communication Interface	RS-485
Relay Type	2 Form A(R1,R2), 2Form C (R3, R4)
Transmission distance	500M
Signal LED	Power on, all channel
Power supply	Screw terminal, or external DC adapter
Power consumption	2.7W
Dimension	151 x 75 x 26 mm

Model	CP-SI16
Output Channel	16 digital output channels
Communication Interface	RS-485 differential 2 half / duplex wires
Communication Speed	Baud rate from 1.2 Kbps to 115.2 Kbps
Transmission distance	RS485 Up to 4000ft (1200M).
Signal LED	Power on, all output channels
Dual watchdog	Reset circuit module / Host operating status
Power supply	Screw terminal, or external DC adapter
Power consumption:	1.5W
Dimension	151 x 75 x 26 mm

Model	CP-SO16
Input Channel	16 digital input channels with counter
Counter Channel / Frequency	16 / 100Hz
Communication Interface	RS-485 differential 2 half / duplex wires
Communication Speed	Baud rate from 1.2 Kbps to 115.2 Kbps
Transmission distance	RS485 Up to 4000ft (1200M).
Signal LED	Power on, all input channels
Dual watchdog	Reset circuit module / Host operating status
Power supply	Screw terminal, or external DC adapter
Power consumption:	1.5W
Dimension	151 x 75 x 26 mm

▶ Specifications are subjected to change without prior notice.

SCSI Card

● RAID Management

- Enhanced Reliability and stability with a knock-down cooling fan
- Backward compatible with previous SCSI generations
- 133MHz, 64bit PCI-X interface, with maximum 1066 MB/s data throughput
- Supports Double Transition
  Clocking: Packetized
  Protocol: Quick Arbitration and
  Selection: Skew Compensation and
  Domain Validation

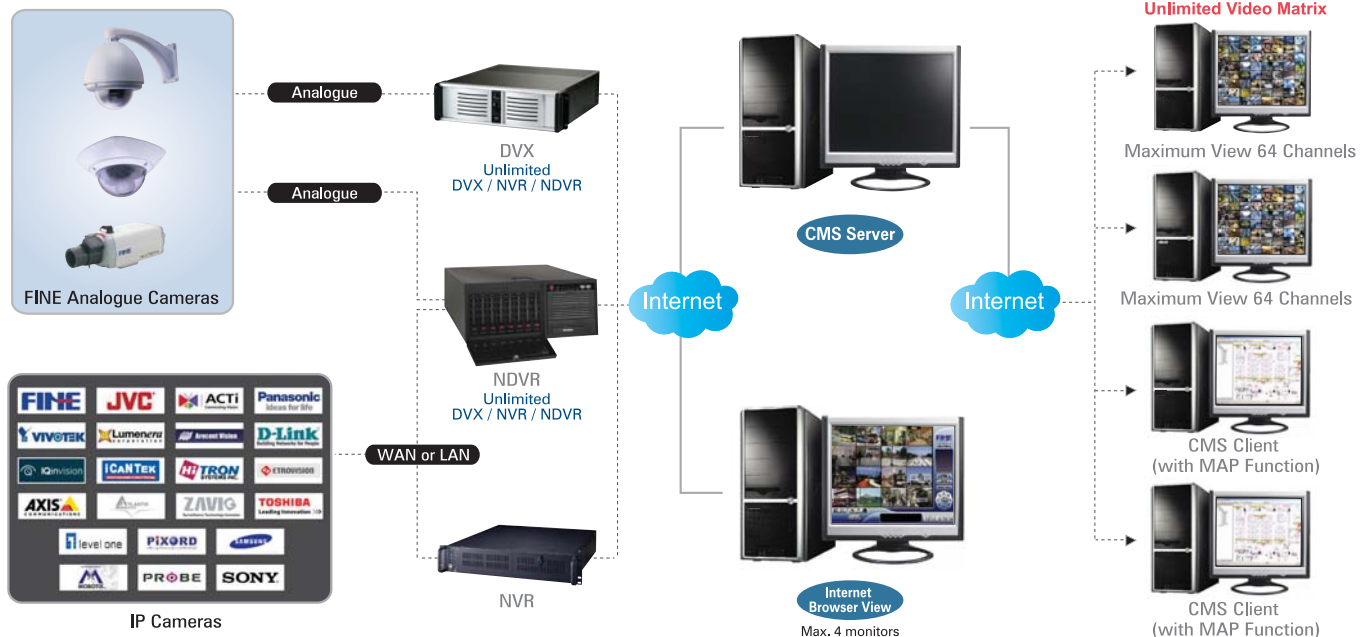| Model	SCSI-390U4B
Protocols Supported	Ultra 320 LVD, Ultra160/Ultra2 LVD, Ultra-Wide SCSI
	Ultra & SCSI-2
SCSI Processor	LSI 53C1020 (SCSI-390U4B Only)
SCSI BIOS/Channel	Yes (Flash) Channel:Single (SCSI-390U4B)
Max Transfer Bate	320 MB/Sec (Ultra320)
Internal Connectors	68-pin HD (SCSI-390U4B Only)
External Connector	68-pin VHDCI (SCSI-390U4B Only)
PCI Interface	64/32 bit, PCI-X (SCSI-390U4B Only)
Max Devices	15/30
Drivers Available	Dos ASPI, Novell NetWare, Solaris, Sun Solaris, Windows 2000/NT/XP, SCO Unix Open Desktop/Open Server, SCO UnixWare, Linux
Target Applications	**Supported Internal SCSI** Devices: Transfer Rate: 10MB/sec~320MB/sec, Bus Width: 8-bit, 16-bit CD-ROM, CD-RW, DVD-ROM, MO, Tape, HDD,..etc. **Supported External SCSI** Devices: Transfer Rate: 80MB/sec~320MB/sec, Bus Width: 16-bit HDD subsystem, RAID, CD-ROM, CD-RW, DVD-ROM, MO, Tape, Scanner,...ect. Options: Different sized brackets can be mounted on either 1U or 2U case

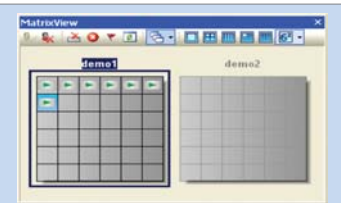▶ Specifications are subjected to change without prior notice.

Central Management System (CMS)

Software Block Diagram:

Unlimited Video Matrix

Analogue

Analogue

FINE Analogue Cameras

DVX
Unlimited
DVX / NVR / NDVR

NDVR
Unlimited
DVX / NVR / NDVR

WAN or LAN

IP Cameras

NVR

Internet

CMS Server

Internet

Internet Browser View
Max. 4 monitors

Maximum View 64 Channels

Maximum View 64 Channels

CMS Client
(with MAP Function)

CMS Client
(with MAP Function)

Manage all NVR / NDVR and supported IP camera/video server

Up to 64 concurrent live camera viewing for each video matrix

Intuitive EMap GUI to indicate all the alarms

Remote desktop and configuration to manage remote server

This seamless management of digital video, audio and data is a powerful solution for large scale installations

The Central Management System (NCS) is a powerful system designed for large-scale and high level enterprise projects. CMS can manage all product lines including NDVR Hybrid, NVR, DVR and NVRmini. The NCS supports unlimited cameras, I/O device, POS, servers and users. The controls and operation of CMS is clear cut and map centric. It has the most powerful alarm management system among all product lines and can control unlimited matrices viewing consoles in the centralized control room. NCS Matrix offers a video wall for users to get video and manage alarm efficiently and instantly.

Key Features

- Authentic client-server architecture
- Centralized management
- Supports all recording servers (NDVR, NVR, DVR and NVRmini)
- Supports unlimited cameras, I/O devices and POS
- Supports unlimited display matrices for remote live view with PTZ and joystick control
- Supports unlimited layers of E-map
- Supports H.264, MPEG4, MJPEG, and MxPeg video compressions
- Supports IP cameras, megapixel cameras and video servers
- Device groups
- Advanced GUI alarm management
- Alarm status, data mining and reporting function
- Instant playback
- Remote backup
- Embedded remote desktop access to any servers (NDVR, NVR, DVR and NVRmini)

System Overview

Component	Description
Overview	Access and control unlimited cameras, I/O devices and POS from any recording servers (NVR/DVR/NDVR Hybrid and NVRmini). SQL Server 2005 Express Database.
Client -Server Architecture	Unlimited clients and multi-monitor support. Clients support popup live window and instant playback, remote playback, embedded remote playback application and smart search in playback for special events.
E-Map	Tree structured map layout supporting unlimited maps layers. Intuitive GUI indicator of cameras, I/O devices, POS and server locations.
Alarm management	Real-time alarm management supporting up to 45 alarm types, 6 video analytic events, alarm status, priorities and independent alarm coverage, data mining tool and much more.
Central Management & Remote Desktop	Assign different levels of privilege to access server, camera, alarm, log and much more to each user account and user group. Built-in "remote desktop configure" can remotely configure any NVR/DVR/NDVR.
Display Matrix	Unlimited video matrices supporting up to 64 channels of video display per monitor.

Central Management System (CMS)

Display mode with E-Map support
Navigation design for zoom in/out

Alarm Live Video Pop up notification

Remote Playback Window

Remote Back up Recorded Video

Low Disk Space, Disconnect Servers,
Unsuaual System Health Alarm

Remote PTZ control

Advanced Alarm Search

● Technical Details

■ NCS Alarm Server:
- Ultimate recording servers: Centralized management station supports unlimited number of recording servers (NDVR, NVR, DVR and MiniNVR).
- Client/Server architecture: NCS client features popup live window and instant playback, remote playback, embedded remote playback application and smart search in playback for special events.
- SQL database: Uses SQL Server 2005 Express to store all alarm logs.
- Instant alarm notification: Real-time alarm management supporting up to 45 alarm types, 6 video analytic events, alarm priorities and independent alarm coverage, data mining tool and much more.
- User management: Assign different levels of privilege to access server, camera, I/O device, POS, alarm, log and much more to each user account and user group.
- Smart time zones: Central Server is designed to manage servers across different time zones. It features Coordinated Universal Time (CUT) and can translate local time at recording server site into the time zone of central management z station
- License Management: To register and validate your licenses, the system offers easy-to-use online activation via the Internet and alternatively

■ NCS Client
Operator Mode:
- Multi-Monitor scenarios:
  - Monitor 1 – E-Map/Navigation panel
  - Monitor 2 – Alarm panel, event list, remote playback
  - Monitor 3-N – Live video display matrix
- Map centric Intuitive operation: All NCS functions are accessible directly from the E-map.
- Automatic startup and login: NCS Alarm Server/Client/Matrix can start up and login automatically when the servers restart.
- Automatic device synchronization: Automatically synchronize for all of the IP cameras, I/O device and POS in the servers.
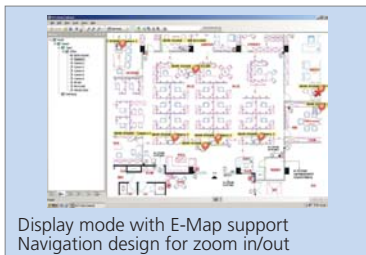
■ E-Map:
- Hierarchical map tree: Tree structured map layout supporting unlimited maps layers.
- Custom Map Indicators: Recording servers, cameras, I/O devices and POS each have its unique indicators. Operator can place them anywhere on the E-map or even design its own indicator icons.
- Instant Alarm Notification: Real-time alarm management supporting up to 45 alarm types, 6 video analytic events, alarm priorities and independent alarm coverage, data mining tool and much more.
- Intuitive Map Operations: All NCS functions are accessible directly from the E-map. Security operator can open live video window, instant playback window, remote backup, query alarm, trigger digital output devices, check system status, search POS transaction data and more.
- User-friendly E-Map tool: Users can edit maps and servers easily, as well as make use of navigation tool to zoom in and out of the map view, drag and drop the cameras and much more.
- Multiple image formats: Import any image in BMP, GIF, JPEG, PNG, and TIFF formats.
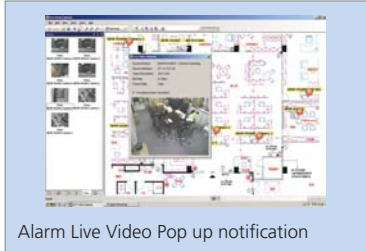
■ Alarm Management:
- Powerful Alarm Management: Real-time alarm management supporting up to 45 alarm types, 6 video analytic events, alarm priorities and independent alarm coverage, data mining tool, alarm note and much more.
- Alarm Priority: Assign alarm priorities (critical, high, normal, low) to each alarm to increase the efficiency in response and data mining.
- Alarm Coverage: Operator can schedule each alarms to be active at a specific times or time intervals.
- Alarm Management Guide: Attach an alarm management guide to each of the alarms so the operator knows how to respond to different alarms.
- Alarm Notifications: NCS client can play sound, popup live video window, active alarm matrix, send email alarm and SMS message at the moment of an event trigger.
- Print Alarm: Client can print out a detailed alarm report with snapshots, alarm guide and timestamp included.
- Powerful data mining: User can quickly search alarm history by alarm name, operator name, alarm status, alarm priority, time interval, source device, alarm type and keyword search of alarm note.
- Export Alarm list: User can export alarm history to Excel table.
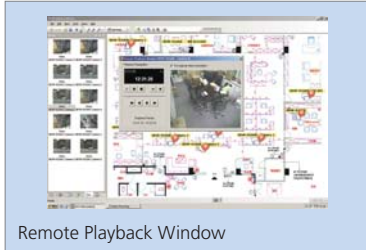
■ NCS Matrix:
- Live Matrix: NCS Matrix stream and display live video from any recording server (NVR/DVR/Hybrid/NVRmini) as commanded by NCS client.
- Multi-channel live view: Each matrix computer can display up to 64 channels of live video per monitor and supports multi ple monitor display.
- Display layout: Supports 9 different display layouts (1/4/9/12+1/16/25/36/49/64).
- Camera sequencing (auto scan): Matrix can loop through all the cameras automatically at a specified interval.
- PTZ Control: Full functional PTZ control panel on the NCS client can be used to pan, tile and zoom the cameras displaying on NCS matrix.
- Alarm Matrix: Matrix can popup alarmed cameras instantly upon an unusual event on any matrix monitor specified.
- Matrix Profile: Each user/user group can be assigned to a different matrix profile with specific camera viewing privilege.
- Transcoding: Live display at different frame rate and resolution
- Audio: Listen live and recorded audio from cameras' microphone through NCS Client.

Extension:
Remote Desktop
- Build-in Remote Desktop: Embedded remote desktop tool that can be used to configure any recording servers (NVR/DVR/Hybrid) directly from the central management station.

Remote Playback System
- Multi-channel Remote Playback: Remote playback of 16 channels recording from any one of the servers (NVR, DVR, NDVR and NVRmini).
- Layout: Playback in full screen, single channel, 4, 9 and 16 channel simultaneously.
- Export video: Take a snapshot of the recording in JPEG format or export a section of the video in "AVI" and "ASF" format with digital water mark.
- Smart Search: Search for 5 different special events (general motion, missing object, foreign object, camera occlusion and signal lost) in recorded files with date, time and log file.

Central Management System (CMS)

● Technical Specifications

Function	Description
Key features	
Client Server Architecture	One CMS server could be connected by several CMS clients
Supported Devices	Support all based site, as well as all I/O devices, POS and IP camera brands supported by Main Console v3.2.0 and NAS NVRmini v2.1
Unlimited Server Solution	Unlimited access of cameras and DVR/NVR/NVR-mini sites
Multiple Matrix System	Unlimited matrix consoles could be connected through network
Live Viewing	Up to 64 concurrent camera viewing for each matrix console
Full Alarm Management	Acknowledge or manage alarm log in the most efficient way.
Triple Monitor Scenario	
Default Monitor #1	Navigation Panel / Map Section
Default Monitor #2	Live Matrix System
Default Monitor #3	Alarm List / Message List / Remote Playback
CMS Server	
Alarm Database	Use SQL Server 2005 Express to store all the alarms
Central Server	Store the site map data by hierarchical structures
	Directly connect to surveillance server to get alarm notifications
	Provide TCP service for CMS clients' access through network
	Registers different time zones into UTC format
Supported Notification Type	Send E-mail / SMS message
E-Map	
Map Tree Hierarchy	Unlimited level of display site map
Maps Formats	Supported image format: BMP, GIF, JPEG, PNG, and TIFF
Define Surveillance Servers	New / Edit / Delete / Disable and Enable
Define Cameras	New / Edit / Delete / Disable and Enable
Navigation Tools	Use to use zoom in, zoom out and drag operation
Indicators on Maps	Indicators for maps, servers, cameras, I/O devices and POS
	Indicator icons support image format with alpha channel (TIFF)
	Display camera coverage
	Easy to find device on Map and Matrix View
Instant Status Notification	show correspondingly small icon nearby the devices automatically to notify users of the events
Intuitive Operation on Maps	Open Last Alarm
	Open Live Video Window
	Open Instant Playback Window
	Backup Recorded Video
	View Server Status Report
	Search POS transaction data
Live Popup Window	Live popup window to use audio function and show live video with PTZ control panel
	Set stream profile to change video quality
	Snapshot and POS transaction overlay
Playback Popup Window	Remote playback popup window to replay recorded video and audio Export to AVI/ASF file and snapshot with digital watermark
Alarm Management	
Supported Alarm Type	Video Signal Abnormal
	Digital Input Trigger (Normal / Emergency)
	POS Alarm Trigger
	Network Abnormal
	DVR / NVR Abnormal
	Motion / Missing / Foreign / Focus / Blocked
	Low Disk Space
	CPU temperature High / Fan Speed Low
Action when Alarm	Instant notifications on map and event list
	Go to specific map layer
	Play sounds
	Automatically show live video on popup window
	Automatically show live video on live matrix system
	Send SMS
	Send Email
Alarm Viewing	Filter tools to survey existing alarm history
Alarm Detail Popup	Show / Print a specific alarm with image preview
Advanced Alarm Search	Access required alarm logs in the most efficient way

Function	Description
Matrix System	
Live Viewing	Up to 64 concurrent camera viewing
Grid Type	1, 4, 9, 12+1, 16, 25, 36, 49, 64
View Type	Flexible auto scan mechanism and full screen viewing
Automatically Popup	Show the live video associated with alarms
PTZ Panel	Floating PTZ panel to manipulate cameras on the matrix system
Joystick Support	Control PTZ camera by Joystick via NCS Client
Remote Playback System	
Remote Playback	Up to 16 concurrent camera viewing
Grid Type	1, 4, 9, 16
Export Function	Save as image and video, as well as printing
Smart Search	Fast search based on the specific event
	Include General motion, Missing object, Foreign object, Lose focus and Camera occlusion
Miscellaneous	
UserGroup Authority	Alarm Management
	View Alarm Image
	View Live Video
	View Recorded Video
	PTZ Control
	Control Digital Output
	Remote Desktop
	View and Search POS transaction
	Access Devices
User Authority	User/Password
	Phone Number
	Email / Phone number
	UserGroup
	Coverage
	Matrix Profile
Built-in Remote Desktop	CMS could control servers through remote desktop protocol

NVR Supporting Cameras

IP Camera Brand(s)	FINE Cisco EverFocus Icantek Lorex Panasonic (PSS) Seorim Y-cam	Arecont Digimerge Eyeview IQinvision Lumenera Pixord Sony Zavio	Atlantis D-Link Vivotek JVC Mobotix Planet Toshiba ACTi	Axis Dynacolor HIKVision LevelOne Moxa Samsung Truen Sanyo	Basler Etrovision Hitron Linksys Panasonic (PCC)
Camera Format	H.264, MPEG4, MJPEG, MxPEG				

Supporting Language

Bulgarian	Chinese (Simplified)	Chinese (Traditional)	Danish	English	Finnish
Italian	Portuguese (Brazil)	Spanish			

▶ Specifications are subjected to change without prior notice.

4 / 9 / 16 CHANNEL Stand Alone NVR

● Key Features

- H264 & M-JPEG decompression format support.
- Real-time Display & Playback.
- Support Mega Pixel Camera for each channel.
- Support HDMI Video interface (optional).
- Support CMS (Central Management System)/ 3GPP
- Audio Backup / Audio Streaming.
- Graphic User Interface (GUI).
- Support time-search & event-search function under Ethernet remote control mode.
- Up to four online clients for independent remote control; individual live-time, play-back & time-search function available
- Support PPPoE/ Static/ DHCP IP & DDNS
- Powerful mobile surveillance function, support JAVA, blackberry, iPhone & windows mobile

● Technical Specifications

Model		NVR-1204H	NVR-1209H	NVR-1216H
Video	Mode		Triplex	
	Display Channel	Max. 4 Channels	Max. 9 Channels	Max. 16 Channels
	Support IP Camera Resolution	Up to 1600 x 1200 (2 M-pixel)		
	Display Frame Rate	Up to 30 FPS @ NTSC per CH		
	Split Screen	1, 4	1, 4, 9	1, 4,9,16
	Video Output (VGA)	Yes		
	Video Output (HDMI)	No	Yes (optional)	
Audio Output		Phone Jack x 1		
Audio Back up		Yes		
Audio Streaming		Yes		
Recording	Compression Rate	H.264		
	Recording Rate	Up to 30 FPS @ NTSC per CH		
	Recording Mode	Manual / Schedule / Alarm		
Playback & Search	Playback Speed	Fast Forward X 2 X 8 X 16 X32		
	Time Search	Yes		
	Event Search	Yes		
OSD & Control Interface	On Screen Display & Setup	Time / Date / Setup Menu		
	Graphic User Interface (GUI)	Yes		
	Mouse	Yes		
	IE Browser	Yes		
	Player	Yes		
Storage & Backup device	Internal HDD support	SATA HDD x 2		SATA HDD x 4
	External USB Backup device (PAN DRIVE, HDD, BURNER)	Yes		
	Internal DVD Burner Backup	No		
Network	Ethernet	Yes (1G)		
	IE Remote Control	Yes		
	DDNS	Yes		
	NTP	Yes		
	E-MAIL & FTP	Yes		
	Network IP	Static/ Dynamic/ PPPoE		
	Multi-Remote Client	Yes (4 Clients at the same time available)		
Alarm	Alarm Input	2In		16 In
	Alarm Output	2 Out (NO/ NC)		
	Motion Detection	Yes		
	Motion Detection Area	Yes		
	Motion Detection Sensitivity	1-10		
	Video Loss Detection	Yes		
	Alarm Recording	Yes		
	Pre-Alarm Recording	Yes		
	Buzzer	Yes		
Setup	Daylight Saving Time	Yes		
	Watermark	Yes		
	Privacy Masking	Yes		
	PTZ Control	Yes		
	RS-232	No		Yes
	RS-485	Yes		
	Digital Zoom	Yes		
	Password Control	Two levels, one for system and the other for HDD format		
	Key-lock	Yes		
	Multi-Language	Yes		
	Firmware Upgrade	USB Host & Update on line		

▶ Specifications are subjected to change without prior notice.

POE Power Meter-FPPM-100

PoE Power Meter FPPM-100

FPPM-100 OVERVIEW

FPPM-100 is an on-site test and measurement device for PoE device. It gets rid of the inconvenience method to test PoE function on the test site.Normally, a certified PSE device can work well with the PD if the power specification what PSE can provide fits the power required that the PD needs. However, the test in office or lab may not guarantee the effect in real condition if the PD is located far away from the PSE.

Some unpredictable reason such as the length of cable, the pin location in RJ-45 connector and the quality of network cable may affect the real power available. It needs an on-site PoE measurement device that can exam and test the power status for PD in real condition.

FPPM-100 is a convenient and compact size on-site PoE tester. It verify and tests the maximum power supply from the PSE to PD that it may locate below the roof, above the decorated ceiling, under the ground or even stay under harsh environment.

Powered by replaceable and rechargeable battery is a key feature of FPPM-100 that the technical personnel can take it to test terminal for PD at any locations. Status and digital LED reveal the general and maximum power status from PSE and push terminal block can hold the bare wires of network cable for test before clamping the wire to the RJ-45 connector. Pass or Fail LED indicator informs the technician the result instantly. These test procedures guarantee the power supply to PD device successfully. The FPPM-100 is truly the best assistant tool for installation of PD device.
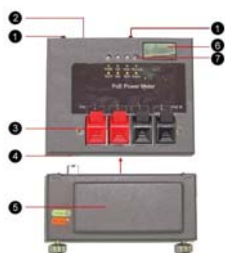
Key Features

- Measure power status generated from PSE for PD in PoE network.
- Compact portable size for on-site measurement of PoE power status.
- Measure power status for PD without bulky test equipment.
- Able to measure maximum available power (watt) and running voltage.
- Able to measure Mode A and mode B PoE connection.
- Convenient push terminal that can fix the bare wire for test if RJ-45 connector is not clamped.
- Exclude and isolate power problem before really connect power to PD.
- Pass or Fail LED indicator to tell qualify or abnormal power status.
- Replaceable external battery pack for continually measurement of each test site.
- Attachable neck belt that is convenient to hold the device for on-site measurement without hand.
- Build-in temperature sensor and LED indicator to inform user overheat condition if high power load test is applied.

BENEFITS

- Do on-site PoE test without carrying bulky test equipment.
- Wear FPPM-100 by attachable neck belt that is easy to work anywhere, such as stand and work at ladder.
- Realize the power status of the PoE cable immediately for installation of PD.
- Replaceable battery pack for the same or different technical personnel to work all day long.
- Find the problem of PoE cable wiring before really install the PD.
- Check before acceptance of PoE wiring task that is done by third party contractor.
- Examine and tune the powered pair of UTP cable before clamping to the RJ-45 connector.
- Examine the maximum power supply to network cable to prevent unsuitable overload PD is attached.
- Save time to debug power problem of PoE equipment installation.
- Quality assurance of power status for PoE equipment installation.

ILLUSTRATION

❶	Operation Buttons
❷	Network UTP Port
❸	Push Terminal Block
❹	Power Input Port
❺	External Battery Pack
❻	LED Display Window

SPECIFICATIONS

Interface

- Top Side: 4 x Push Terminals connectors to fix bare wire
- Front Side: 1 x Network UTP port to measure power status

LED indicators

Status or result is shown by the LED indicators below with different colors.
- PWR / TEST: Power status / Test and system status
- OK / NG: Test result of each test
- WATT / VDC: States of measured power consumption (watt) or voltage. Please watch the reading of LED display
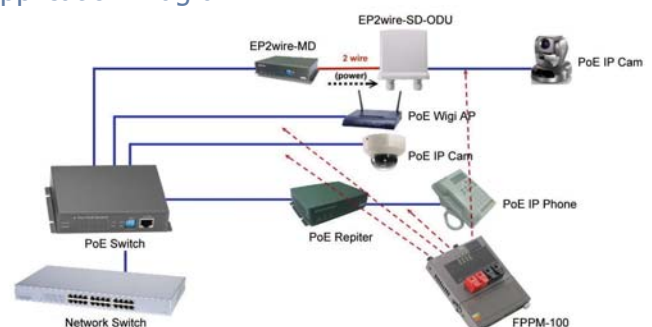- Normal / Alarm: State of measured temperature by reading in LED dis play or the device is overheated.

LED Display Panel

3 digits LED display: Show the measured voltage, watt or temperature inside the device.

Operation Buttons

- Start / Set (–): Start to measure maximum available power (watt) and Voltage. While pressing Start button for more than 3 seconds and "beep" sound heard, Set the minimal power (watt) on the LED by (–) or (+).
- Display / Set (+): Display tested PoE power/VDC or set up minimal power (watt) shown on LED indicator.
  - Voltage LED state: Current unit is Voltage, reaqd the voltage value on LED display panel
  - Watt LED state: Current unit is Watt, read the watt value on LED display panel
  - Temperature LED state: Current unit is temperature, read the temperature value on LED display panel
- External Battery Pack
  - Able to mount external battery pack to FPPM-100 for on-site test without power supply.
  - USB port of both FPPM-100 and battery pack are all for power supply or charge purpose without data link to PC
- Humidity:
  - Operating: 0% ~ 85% RH
  - Storage: 0% ~ 85% RH
- Dimensions: 95 mm x 76.6 mm x19.6 mm (without battery pack)

Application Diagram

EP2wire-SD-ODU

EP2wire-MD

2 wire
(power)

PoE IP Cam

PoE Wigi AP

PoE IP Cam

PoE IP Phone

PoE Switch

PoE Repiter

Network Switch

FPPM-100

MAIN APPLICATIONS

- On-site measurement of PoE power status for PD installation
- Examine the power specification of PSE
- Check before acceptance of PoE installation and wiring task
- Assistant tool for PoE application and service provided by ISP / Telecom company

FCV-232E
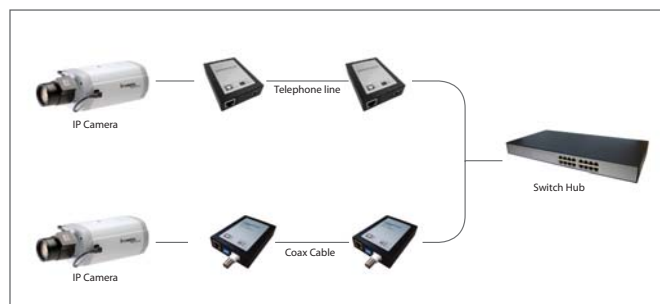# Long Reach Ethernet Extender

FCV-232E

FCV-232E

is a Long Reach Ethernet Extender with one Ethernet port (on 1 RJ-45 connector) and one VDSL port on 1 RJ-11 or BNC connector. This is a bridge mode modem accommodating Ethernet and VDSL technologies to extend Ethernet over single-pair phone line by using a VDSL signal. Up to 100/60 Mbps (or 90/90 Mbps with synchronous data rate) transition bandwidth within 300m and 40/10 Mbps for 1km long range connections provides ultra-high performance to the pervasive telephone line network. Its plug-n-play solution minimum installation time & cost by allowing video streaming and data to share the same telephone pair without interference.

With one DIP switches configuration, the FCV-232E including the CO (Central Office) site and CPE (Customer Premise Equipment) site. The long distance support feature makes this extender be a great and ideal solution for FTTx (Fiber to the Building, Fiber to the Campus or Fiber to the Home) applications. It supports high bandwidth VDSL2 over existing telephone wires in the "last mile" from the ISP / Telecom / Service provider's fiber mode to the buildings and customers' home.

Key Features
- 1 full-duplex VDSL links via RJ-11 / BNC connector
- Selectable CO and CPE mode
- Selectable fast and interleaved mode
- Selectable target SNR margin
- Compliant with ETSI, ITU and ANSI standards

Stand Alone DVR

Technical Specifications:

Standards	IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3x Full Duplex ETSI ITU ANSI Full ITU-T G.993.1 (VDSL) compatible
Interface	G.997.1 compatible. RJ-11 female Phone Jack or BNC for coaxial cable) RJ-45 female Ethernet jack
Switching Method	Store and Forward
Forwarding Rates	1000Mbps port – 1,488,000pps 100Mbps port - 148,800pps 10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5E UTP/STP
Led Indicators	Duplex Speed Link / Act Power Master Link / Negotiation
Power Input	DC 5V/2A
Dimensions	102 x 75 x 23 mm (L x W x H)
Weight	0.28 kg
Operating Temperature	0 to 45°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

PoE Single Port Injector FPI-100

IEEE 802.3at/af PoE, 10/100/1000Mbps LAN

FPI-100

- Up to 30W of PoE Power Feeding on 2-pairs
- IEEE 802.3at Compliant with 2-event classification
- IEEE 802.3af backward compatible
- Compatible with IEEE 802.3af or Legacy PoE applications
- Safe on Low Power Devices Receive Only the Power They Need
- Safe and Reliable Power to WLAN Access Points
- Automatic Detection and Protection of Non–standard Ethernet Terminals
- Supports 10/100/1000Base-T LAN environment
- Pararell slide-in design to ease the installation

Product Overview

FPI-100GA is a single port, high-power PoE PSE solution for remote PoE PD devices. Generating up to 30W, FPI-100GA supplies remote power for new applications such as wireless Access Points, pan-tilt-zoom (PTZ) IP cameras and video-phones. It complies to IEEE 802.3at PoE standard and backward compatible to IEEE802.3af. It can work with 10/100Base-T networking devices and emerging 1000Base-T devices such as Wi-MAX and wireless IEEE 802.11n access points.
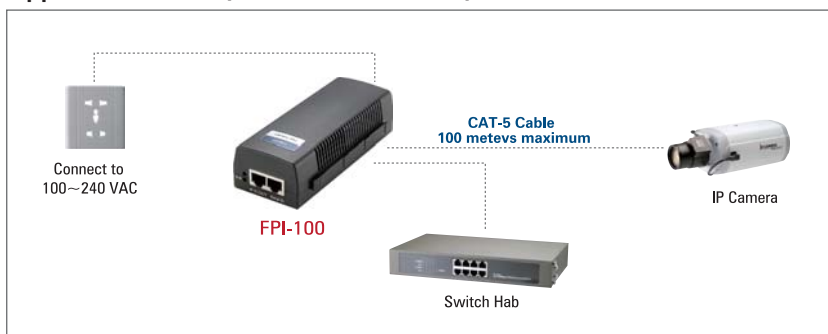
Ordering Information

Part Number	Description
FPI-100GA	30W, 802.3at/af, PD detection, GbE, PoE PIn 1/2(+), 3/6(–)
FPI-100A	30W, 802.3at/af, PD detection, FE, PoE PIn 4/5(+), 7/8(–)
FPI-100GF	15.4W, 802.2af, PD detection, GbE, PoE PIn 1/2(+), 3/6(–)
FPI-100F	15.4W, 802.3af, PD detection, FE, PoE PIn 1/2(+), 3/6(–)
FPI-100GH	30W, no PD detection, GbE, PoE PIn 4/5(+), 7/8(–)
FPI-100H	30W, no PD detection, FE, PoE PIn 4/5(+), 7/8(–)
FPI-100G	15.4W, no PD detection, GbE, PoE PIn 4/5(+), 7/8(–)
FPI-100	15.4W, no PD detection, FE, PoE FPIn 4/5(+), 7/8(–)

Specification

Specifications of FPI-100GA	
No. of PoE PSE Ports	1
Pass Through Data Rates	10/100/1000 Mbps
Power over Ethernet Output	
FPIn Assignment and Polarity	1/2 (+), 3/6 (–) or 4/5(+), 7/8(-)
Output Power Voltage	52 VDC Maximal
User Port Power	30 Watts Maximal
Input Power AC Input Voltage	100 ~ 240 VAC
Requirements AC Input Current	0.8A @ 100-240 VAC
AC Frequency	50 to 60 Hz
Dimensions	87.9 mm x 51.3 mm x 166 mm
Weight	350g
Indicators	System Indicator: AC Power (Green)
Connectors	RJ-45
Environmental Conditions	
Operating Ambient Temperature	-10 to 45°C
Regulatory	IEEE 802.3at/af, RoHS Compliant, CE/FCC
Safety Approvals	EN 60950:2006

Application Diagram

Application of PoE (Power over Ethernet)

Connect to 100~240 VAC

FPI-100

CAT-5 Cable 100 metevs maximum

IP Camera

Switch Hab

FPD-203E: POE Repeater 1 Port POE Splitter(PD) and 1 Port POE Injector(PSE)

FPD-203E

FPD-203E

is 2-port PoE externder (1-port PoE Splitter (PD) and 1-port PoE Injector (PSE)) that is designed for extending distance for another 100M per extender and cascading for longer distances via Cat.5 cable. It is powered by PoE switch or PoE injector without extra power required. Plug and play - It's easy to install into the network environment.

It's a great accessory for you to extend PoE network.

Key Features

- 1 port PoE Splitter (PD) and 1-port PoE injector (PSE)
- Extending distance for another 100M per extender and cascading for longer distances
- IEEE 802.3af PoE standard
- No extra power required
- Metal Case

IEEE 802.3af Power over Ethernet (PoE) ports

FPR100-E features IEEE 802.3af Power over Ethernet (PoE). This product runs over existing LAN cable to power IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPR100-E to the existing networking, the installed networking products, such as: Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located or the networking can be extending distance for another 100M per extender and cascading for longer distances.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Technical Specifications:

Standards	IEEE-802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
Features	Number of Ports: 1 x PoE Splitter and 1x PoE Injector
Filtering/Forwarding Rates	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	100BaseTX Cat. 5 UTP/STP
Led Indicators	PD: Power (Link)
	PD: Data/Act
	PSE: Link (provide power)
	PSE: Data/Act
Power Output	1 port 48V/DC Output
Dimensions	130 x 77 x 24 mm (L x W x H)
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPD-205E: 5-port POE Repeater: 3 Port 10/100M Fast Ethernet Switch + 1 Port POE Splitter (PD) & 1 Port POE Injector (PSE)

FPD-205E

FPD-205E

is 5-port extender with 3-port 10M/100M Fast Ethernet Switch + 1-port PoE Splitter (PD) and 1-port PoE injector (PSE) that is designed for extending distance for another 100M and cascading for longer distances via Cat.5 cable. It is powered by PoE switch or PoE injector without extra power required. Plug and play - It's easy to install into the network environment. For the small or medium network environment is to strengthen its network connection. This product is compact in size, making it ideal for Desktop users with limited space.

Key Features

- 3-port 10/100M Fast Ethernet Switch + 1- port PoE Splitter (PD) and 1-port PoE injector (PSE)
- Extending distance for another 100M per extender and cascading for longer distances
- IEEE 802.3af PoE standard
- No extra power required
- Auto-MDI/MDI-X
- Auto-Negotiation
- Metal Case

IEEE 802.3af Power over Ethernet (PoE) ports

FPD-205E features IEEE 802.3af Power over Ethernet (PoE). This product runs over existing LAN cable to power IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPD-205 to the existing networking, the installed networking products, such as: Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located or the networking can be extending distance for another 100M per extender and cascading for longer distances.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 3 x 10/100BaseTX + 1-port PoE Splitter (PD) + 1-port PoE injector (PSE)
	MAC Address: 1K
	Buffer Memory: 512K bits
	Transmission Method: Store and Forward
Filtering/Forwarding Rates	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	100BaseTX Cat. 5 UTP/STP
Led Indicators	PD: Power (Link)
	PD: Data/Act,
	3 Port: Link/Act
	PSE: Data/Act
	PSE: Link (provide power)
Power Output	1 port 48V/DC Output
Dimensions	130 x 77 x 24 mm (L x W x H)
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPD-2051E
5 Port 10/100M POE Ethernet Switch
with 1 POE Port

FPD-2051E

FPD-2051E

is 5-port 10M/100M with 1 PD/PoE port PoE Ethernet Switch thatis designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for users with limited space. It is a superb choice for expanding your network.

Key Features

- 5-Port 10/100BaseT(X) with 1 PD/Power over Ethernet Port
- Metal Case with Palm Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Store and Forward

IEEE 802.3af Power over Ethernet (PoE) port

FPD-2051E features 1 IEEE 802.3af Power over Ethernet (PoE) port to connect to PoE switch. Its port No. 5 can be either Ethernet port or PD/PoE port for DC power input. By adding FPD-2051E to existing networking, user will not compromise to the electrical system.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable to get both power and data where power source is difficult to obtain. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 5 10/100BaseT(X) with 1 PD/Power over Ethernet Port
	MAC Address: 2K
	Buffer Memory: 1 Mbits
	Transmission Method: Store and Forward
Led Indicators	Per Port: Link/Act
	Per Unit: Power
Power Supply	90~260V/AC, 50~60Hz
Power Consumption	2.5 Watts (Max)
Dimensions	130 x 77 x 24 mm (L x W x H)
Weight	0.3 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class B, CE

FPD-2051GE
5 Port 10/100/1000 POE Ethernet Switch
With 1 POE Port

FPD-2051GE

FPD-2051GE

is 5-port 10M/100M/1000M with 1 PD/PoE port PoE Ethernet Switch that is designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for users with limited space. It is a superb choice for expanding your network.

Key Features

- 5-Port 10/100/1000BaseT(X) with 1 PD/Power over Ethernet Port
- Metal Case with Palm Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Store and Forward

IEEE 802.3af / at Power over Ethernet (PoE) port

FPD-2051GE features 1 IEEE 802.3af / at Power over Ethernet (PoE) port to connect to PoE switch. Its port No. 5 can be either for PoE PD port or Ethernet port for DC power input. By adding FPD-2051GE to existing networking, user will not compromise to the electrical system.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable to get both power and data where power source is difficult to obtain. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps, 100Mbps or 1000Mbps and Half/Full-Duplex mode to adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af / at
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3ab 1000BaseT
	IEEE 802.3x Flow Control
Features	Number of Ports: 5 10/100BaseT(X) with 1 PD/Power over Ethernet Port
	MAC Address: 1K
	Buffer Memory: 104 KB
	Jumbo Frames: 9 KB
	Transmission Method: Store and Forward
Filtering/Forwarding Rates	1000Mbps port - 1,488,000pps
	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	100BaseTX Cat. 5 UTP/STP
	1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act
	Per Unit: Power
Power Supply	DC 5V / 2A
Power Consumption	10 Watts (Max)
Dimensions	130 x 77 x 24 mm (L x W x H)
Weight	0.3 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPD-2081E
8 Port 10/100M POE Ethernet Switch
With 1 POE Port

FPD-2081E

FPD-2081E

is 8-port 10M/100M with 1 PD/PoE port PoE Ethernet Switch that is designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for users with limited space. It is a superb choice for expanding your network.

Key Features

- 8-Port 10/100BaseT(X) with 1 PD/Power over Ethernet Port
- Metal Case with Palm Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Store and Forward

IEEE 802.3af Power over Ethernet (PoE) port

FPD-2081E features 1 IEEE 802.3af Power over Ethernet (PoE) port to connect to PoE switch. Its port No. 8 can be either Ethernet port or PD/PoE port for DC power input. By adding FPD-2081E to existing networking, user will not compromise to the electrical system.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable to get both power and data where power source is difficult to obtain. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 8 10/100BaseT(X) with 1 PD/Power over Ethernet Port
	MAC Address: 1K
	Buffer Memory: 512 Kb
	Transmission Method: Store and Forward
Led Indicators	Per Port: Link/Act
	Per Unit: Power
Power Supply	DC 7.5V/0.8A
Power Consumption	6 Watts (Max)
Dimensions	130 x 77 x 24 mm (L x W x H)
Weight	0.35 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPD-2081GE
8 Port 10/100/1000M POE Ethernet Switch With 1 POE Port

FPD-2081GE

FPD-2081GE

is 8-port 10M/100M/1000M with 1 PD/PoE port PoE Gigabit Ethernet Switch that is designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for users with limited space. It is a superb choice for expanding your network.

Key Features

- 8-Port 10/100/1000BaseT(X) with 1 PD/Power over Ethernet Port
- Metal Case with Palm Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Store and Forward

IEEE 802.3af / IEEE 802.3at Power over Ethernet (PoE) port

FPD-2081GE features 1 IEEE 802.3af / at Power over Ethernet (PoE) port to connect to PoE switch. Its port No. 8 can be either for PoE PD port or Ethernet port for DC power input. By adding FPD-2081GE to existing networking, user will not compromise to the electrical system.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable to get both power and data where power source is difficult to obtain. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps, 100Mbps or 1000Mbps and Half/Full-Duplex mode to adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3af / at
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3ab 1000BaseT
	IEEE 802.3x Flow Control
Features	Number of Ports: 8 10/100BaseT(X) with 1 PD/Power over Ethernet Port
	MAC Address: 4K
	Buffer Memory: 128 KB
	Jumbo Frames: 9 KB
	Transmission Method: Store and Forward
Filtering/Forwarding Rates	1000Mbps port - 1,488,000pps
	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	100BaseTX Cat. 5 UTP/STP
	1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act
	Per Unit: Power
Power Supply	DC 5V/ 2A
Power Consumption	10 Watts (Max)
Dimensions	130 x 77 x 24 mm (L x W x H)
Weight	0.35 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

POE Switches-FPR102

FPR102   2-port PoE Repeater

FPR-102-ODU
Front View

FPR-102-ODU
Side View

FPR-102

FPR102 is a 2-poprt Power-over-Ethernet (PoE) Repeater providing a 100/100Mbps Ethernet transmission for 100m distance and with 2 Ethernet switch ports extending individually another 100m with power over Ethernet capability. It forwards both Ethernet and PoE for another 330ft (100m) using an innovative power-processing scheme and multiple units can be deployed in series for even longer distances, with no degradation in network speed or latency. FPR102 itself is powered by an Ethernet PoE switch (or PoE injector) and so requires no separate power connection in the middle of the cable, making it extremely easy to connect and power IP cameras two or three times further than previously possible without going to fiber or installing midspan power sources.

In the simplest application, a FPR102 allows to connect two PoE Devices (PDs) located 200 meters away from the POE switch. The switch delivers PoE power over the first 100 meters of Cat5 cable to the FPR102, and the FPR102 restores the Ethernet signal and forwards remaining POE power to the PDs 100m away. The FPR102 requires no local power supply, and the FPR102 presents no restriction to the Ethernet network connection. Typically, the PoE switch would be confined to a centrally located equipment room, and would connect to several PDs distributed about the site. With FPR102, each PD may have its own dedicated connection to the switch, and power cable installation to remote switches would not be required.

Advantages

- Extends Ethernet cable installations for another 100 meters
- 2-Port Ethernet Power Sourcing Equipment (PSE)
- No power cable installation required
- Fully Ethernet protocol transparent – no restrictions to network traffic
- 100Mbps Ethernet Wire Speed
- Compatible with IEEE 802.3af PoE standard
- IP66 Weather-Proof for FPR102-ODU outdoor unit
- Simple to install – Plug & Play

PoE Repeater Specifications

Ethernet Interface

- IEEE 802.3x, Auto-Detection for 10/100BaseT and full/half duplex
- Automatic MDIX function
- PoE Input Port: RJ-45 Connector x 1
- PoE Output Port: RJ-45 Connector x 2
- Port-based VLAN function for LAN ports

Power

- IEEE 802.3af Compliant with voltage within 44-57Volt
- Maximum Power Dissipation: 2.5 Watts

LED Indicators

- POWER: Power is ON
- l POE IN: Data Activity of POE in Port
- POE OUT1:   Data Activity of POE Out1 Port
- POE OUT2:   Data Activity of POE Out2 Port

Regulations & Approval

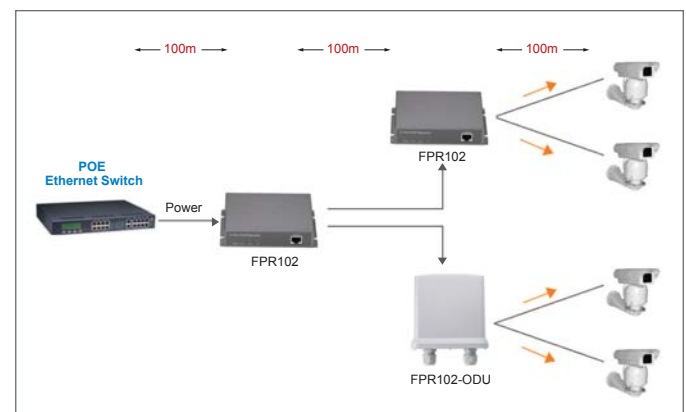- FCC Rules Part 15
- lCE

Physical Dimension

- FPR102   WxDxH: 120 x 90 x 28 (mm)
- FPR102-ODU   WxDxH: 180 x 165 x 95 (mm)

Operating Environment:

- Humidity: 5% to 95% non-condensing
- Temperature: 0 ~ 50 degree C

Application Diagram

2-Port PoE Repeaters

FPS-7008E
8 Port Rack-Mount POE Mid-Span Injector

FPS-7008E

FPS-7008E

is 8-pair Port Rack-mount Power over Ethernet Mid-span Power Supply that is designed to help simplify network maintenance and for small or medium network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 8 port 10/100/1000BaseT(X) Data-In Ports + 8 10/100BaseT(X) Data and Power-Out Ports
- 19" Rack-Mount Size
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-7008E features 8 10/100BaseT(X) Data-In ports and 8 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-7008E to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Technical Specifications:

Standards	IEEE-802.3af
Features	Number of Ports: 8 10/100BaseT(X) Data-In Ports 8 10/100BaseT(X) Data and Power-Out Ports
Led Indicators	Per Port: PoE Act/Status Per Unit: Power
Power Input	90~260V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port 8 Ports at Full 15.4 W Output Supported
Power Consumption	130 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	2.7 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPS-7008GE
8 Port Rack-mount POE Mid-span Injector

FPS-7008GE

FPS-7008GE

is 8-pair Port Rack-mount Power over Ethernet Mid-span Power Supply that is designed to help simplify network maintenance and for small or medium network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 8 port 10/100/1000BaseT(X) Data-In Ports + 8 10/100BaseT(X) Data and Power-Out Ports
- 19" Rack-Mount Size
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-7008GE features 8 10/100/1000BaseT Data-In ports and 8 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-7008GE to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Technical Specifications:

Standards	IEEE-802.3af
Features	Number of Ports:
	8 10/100/1000BaseT Data-In Ports
	8 10/100/1000BaseT Data and Power-Out Ports
Led Indicators	Per Port: PoE Act/Status
	Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port
	8 Ports at Full 15.4 W Output Supported
Power Consumption	130 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	2.7 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPS-7016E
16 Port Rack-mount POE Mid-span Injector

FPS-7016E

FPS-7016E

is 16-pair Port Rack-mount Power over Ethernet Mid-span Power Supply that is designed to help simplify network maintenance and for small or medium network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

■ 16 10/100BaseT(X) Data-In Ports + 16 10/100BaseT(X) Data and Power-Out Ports
■ 19" Rack-Mount Size
■ Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-7016E features 16 port 10/100BaseT(X) Data-In ports and 16 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-7016E to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Technical Specifications:

Standards	IEEE-802.3af
Features	Number of Ports: 16 10/100BaseT(X) Data-In Ports 16 10/100BaseT(X) Data and Power-Out Ports
Led Indicators	Per Port: PoE Act/Status Per Unit: Power
Power Input	90~260V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port 16 Ports at Full 15.4 W Output Supported
Power Consumption	260 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	3.2 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPS-201G
1 Port Gigabyte IEEE802.3at POE Injector

FPS-201G

FPS-201G

is 1 Ethernet Input (data only) port and 1 Output (data + power) port Power over Ethernet Injector that is designed for small or medium network environment to strengthen its network connection. This product can convert standard power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3at compliant, or only the data will be sent through LAN cable. By adding FPS-201G to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

Key Features

- 1 Ethernet Input Port (Data Only) + 1 Ethernet Output Port (Data + Power)
- Compliant with IEEE 802.3at/af
- Smart Plug and Play

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable to deliver both power and data where power source is difficult to obtain. It helps you reduce installation time and cost.

High Power PSE Power Injector

FPS-201G is a high power, PSE Power Injector for use in Power over Ethernet systems. The internal current limit and short-circuit protection are designed to provide up to 30W of PSE output power for power hungry PoE applications such as WAPs, security cameras and RFID readers.

Technical Specifications:

Standards	IEEE 802.3af
	IEEE-802.3at
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3ab 1000BaseT
Features	Number of Ports:
	1 x Input (data only) Port
	1 x Output (data + power) Port
Led Indicators	Per Port: PoE Act/Status
	Per Unit: Power
Power Input	48V/DC
Power Output	48V/DC at Full 25~30 W Output Supported
Power Consumption	35 Watts (Max)
Dimensions	102 x 75 x 23 mm (L x W x H)
Weight	0.28 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 85°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class B, CE

POE Splitter-FPS-103E

802.3af PoE Splitter   FPS-103E   5/9/12V output
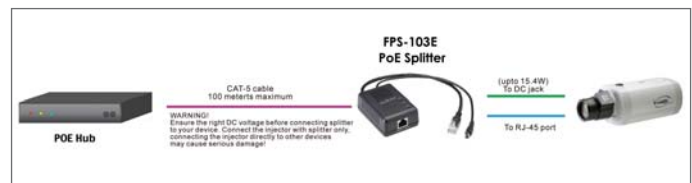
FPS-103E

- 5v, 9v, 12v output adjustable
- IEEE802.3af compliance
- Short circuit protection
- Plug-and-Play
- Delivering power and data to power device
- Light weight and compact size
- For Wireless AP, Bluetooth AP, IP Camera, IP Phone, remote power feeding application
- Regulated output voltage by switch

Specification

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3af Power over Ethernet
Forwarding rate	10Mbps port – 14880pps, 100Mbps port – 148800pps
Connector	Data in: 1 x RJ-45 Data pin 1,2,3,6 Power pin: 4,5(V+), 7,8(V-) or 1,2(V+), 3,6(V-) Data out: 1 x RJ-45, Data pin 1,2,3,6 Power output: 5V, 9V, 12V (Selectable) Power plug dimension: 5.5(OD) x 2.1(ID) x 10mm
Input range	DC 36~48V, 350mA max.
Output range	Total 12.9W, 5/9/12V (Max. 5%, typical 2% voltage accuracy)
Adjust Switch	3-Segment switch for output voltage selection 5/9/12V
LEDs	(green) 5/9/12V
Operating environment	0°C~45°C
Operating Humidity	10%~90% RH (non-condensing)
Storage Temperature	-20°C~70°C
Dimension	81mm x 55mm x 28mm (W x D x H)
Weight	45 g
Certificate	FCC Class A, CE

Application Diagram

Application of PoE (Power over Ethernet)

802.3af /at Compliant, Gigabit PoE Splitter FPS-103AG Series

802.3af /at Compliant, Gigabit FPS-103AG series

FPS-103 Characteristics

- Network devices at Gigabit speeds all within a compact device
- Automatically detects PoE terminals and supplies inline power
- Easily install non-PoE devices where a power outlet is not available
- Reduce installation and network equipment costs
- Safeguards network device with short circuit protection
- Adjustable output DIP switch for 5V, 9V, and 12V adjustable output
- Converts Non-PoE devices with Power Over Ethernet Support
- Auto-sensing power drawn from 802.3af / 802.3at power source equipment(PSE) devices
- Supplies power up to 12 -25 watts
- Light weight and compact size
- 1-Year Warranty

Product Overview

The Gigabit Power over Ethernet Splitter FPS-103AG splits a networked PoE signal into separated power and Gigabit data sources. This device allows administrators to run Gigabit speed PoE cables over long distances and then split the PoE signal into separated data and power sources in order to network non-PoE devices.

Save installation and equipment cost when installing access points, IP cameras and more in remote locations. No need to install network devices near a power outlet. This compact device safeguards valuable network equipment with short circuit protection and quickly creates an integrated PoE and non PoE network at Gigabit speeds.

Ordering Information

Part Number	Description
FPS-103E	10/100M FE, IEEE802.3af
FPS-103EG	10/100/1000M GbE, IEEE802.3af
FPS-103AG	10/100/1000M GbE, IEEE802.3at (25W)

Specifications

Specifications	
Data Rate	10/100/1000 Mbps
Input Power Requirement	1/2(+), 3/6 (–) or 4/5(+), 7/8(-)
Input Power Voltage	FPS-103E/EG: 48Vdc/0.3A, FPS-103AG: 48Vdc/0.6A
Output Power	FPS-103E/EG: 5V(2A),9V(1.1A),12V(1A) FPS-103AG: 5V(3A),9V(2.3A),12V(2A)
Jumper Cable	DC 2.1x 5.5x 9.5mm, (L-300mm) or DC 5.5*2.5*12 mm (White) / 5.5*2.1*12 mm (Blue) / 4.8*1.7*12 mm (Yellow) / 3.5*1.3*12(Red)mm, (L-300mm)
Dimensions	80 mm x 55 mm x 31 mm
Weight	76g
Diagnostic LEDs	DC Power (Green)
Connectors	Shielded RJ-45
Environmental Conditions	
Operating Ambient Temperature	-10 to 45°C
Regulatory	IEEE 802.3at/802.3af, RoHS Compliance
Safety Approvals	EN 60950: 2006, CE/FCC

FPS-254E
5 Port 10/100M POE Ethernet Switch
With 4 Port POE

FPS-254E

FPS-254E

is 5-port 10M/100M with 4 PSE/PoE ports Desktop PoE Fast Ethernet Switch that is designed for small network environment to strengthen its network connection. It's also specially designed for video surveillance in buses, trains, subway cars and emergency vehicles. This product is compact in size, making it ideal for every user with limited space.

Key Features

- 5-Port 10/100BaseT(X) with 4 PSE/Power over Ethernet Ports
- Complaint with IEEE 802.3 af/at
- Metal Case with Palm Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- External Power Supply

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-254E features 8-port PoE IEEE 802.3 af/at supplying up to 30 watts per port. This product can convert standard 12-24V/DC and 48V/DC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. It also features high power awareness to verify whether the network device receive power is IEEE 802.3at compliant, or only the data will be sent through LAN cable. By adding FPS-254E to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af/at
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 5 10/100BaseT(X) with 4 PSE/Power over Ethernet Ports
	MAC Address: 1K
	Buffer Memory: 512K bits
	Transmission Method: Store and Forward
Filtering/Forwarding Rates	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP
	100BaseTX Cat. 5 UTP/STP
Led Indicators	Per Port: Link/Act, PoE Act/Status
	Per Unit: Power
Power Input	48V / DC
Power Output	48V / DC
Power Consumption	40 Watts (Max)
Dimensions	130 x 97 x 24 mm (L x W x H)
Weight	1.3 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPS-804E / FPS-804ME
8-port 10M/100M POE Ethernet Switch With 4 POE Ports Desktop

FPS-804E / FPS-804ME

FPS-804E/ME

is 8-port 10M/100M with 4 PSE/PoE ports Desktop PoE Fast Ethernet Switch that is designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for Desktop users with limited space. It also gives you the option of installing it in a 19" cabinet by rack-mount kits or underneath a desk.

Key Features

- 8-Port 10/100BaseT(X) with 4 PSE/Power over Ethernet Ports
- 11" Metal Case
- Auto-MDI/MDI-X
- Auto-Negotiation
- Web-based configuration & management
- Rack-Mount to 19" Cabinet
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-804E/ME features 4 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-804E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE-802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 8 10/100BaseT(X) with 4 PSE/Power over Ethernet Ports
	MAC Address: 1K
	Buffer Memory: 512K bits
	Transmission Method: Store and Forward
	Switch Capacity: 1.6Gbps
Filtering/Forwarding Rates	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP
	100BaseTX Cat. 5 UTP/STP
Led Indicators	Per Port: Link/Act, PoE Act/Status
	Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port
	4 Ports at Full 15.4 W Output Supported
Power Consumption	65 Watts (Max)
Dimensions	266 x 160 x 44 mm (L x W x H)
Weight	1.3 kg
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-804E	4	8	N/A
FPS-804ME	4	8	Yes

FPS-808E / FPS-808ME : 8-port 10M/100M Desktop PoE Fast Ethernet Switch

FPS-808E / FPS-808ME

FPS-808E / ME

is 8-port 10M/100M Desktop PoE Fast Ethernet Switch that is designed for small or medium network environment to strengthen its network connection. This product is compact in size, making it ideal for Desktop users with limited space. It also gives you the option of installing it in a 19" cabinet by rack-mount kits or underneath a desk.

Key Features

- 8 PSE/Power over Ethernet Ports
- 11" Metal Case
- Rack-Mount to 19" Cabinet
- Web-based configuration & management
- Auto-MDI / MDI-X
- Auto-Negotiation
- Non-Blocking
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-808E/ME features 8 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-808E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3af
	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3x Flow Control
Features	Number of Ports: 8 PSE/Power over Ethernet Ports
	MAC Address: 1K
	Buffer Memory: 512K bits
	Transmission Method: Store and Forward
	Switch Capacity: 1.6Gbps
Filtering/Forwarding Rates	100Mbps port - 148,800pps
	10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP
	100BaseTX Cat. 5 UTP/STP
Led Indicators	Per Port: Link/Act, PoE Act/Status
	Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port
	8 Ports at Full 15.4 W Output Supported
Power Consumption	130 Watts (Max)
Dimensions	266 x 160 x 44 mm (L x W x H)
Weight	1.4 kg
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-808E	8	8	N/A
FPS-808ME	8	8	Yes

FPS-1608E / FPS-1608ME
16-port 10M/100M Rack-Mount With 8 Port Fast Ethernet Switch

FPS-1608E / FPS-1608ME

FPS-1608E / ME

is 16-port 10M/100M With 8-port PSE/PoE Rack-mount PoE Fast Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 16-Port 10/100BaseT(X) with 8 PSE / Power over Ethernet Ports
- 19" Industrial Size
- Web-based configuration & management
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-1608E/ME features 8 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-1608E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3af Power over Ethernet IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100BaseTX Fast Ethernet ANSI / IEEE 802.3 NWay auto-negotiation IEEE 802.3x Flow Control in full duplex Collision / Carrier sense based backpressure in half duplex
Features	Number of Ports: 16 10/100BaseT/T(X) (8 PoE Ports, 8 non-PoE ports) MAC Address: 4K Buffer Memory: 1.5 Mb Transmission Method: Store and Forward Switch Capacity: 3.2Gbps
Filtering/Forwarding Rates	100Mbps port - 148,800pps 10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP
LED Indicators	Per Port: Link/Act, PoE Act/Status Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port 8 Ports at Full 15.4 W Output Supported
Power Consumption	130 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	3.8 kg
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-1608E	8	16	N/A
FPS-1608ME	8	16	Yes

FPS-1616E / FPS-1616ME
16-port 10M/100M Rack-Mount POE Fast Ethernet Switch

FPS-1616E / FPS-1616ME

FPS-1616E / ME

is 16-port 10M/100M Rack-mount PoE Fast Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 16 PSE/Power over Ethernet Ports
- 19" Industrial Size
- Auto-MDI/MDI-X
- Auto-Negotiation
- Web-based configuration & management
- Non-Blocking
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-1616E/ME features 16 IEEE 802.3af Power over Ethernet (PoE) ports supplying up to 15.4 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-1616E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat-5 Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps or 100Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3af IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3x Flow Control
Features	Number of Ports: 16 PSE/Power over Ethernet Ports MAC Address: 4K Buffer Memory: 1.625 Mb Transmission Method: Store and Forward Switch Capacity: 3.2Gbps
Filtering/Forwarding Rates	100Mbps port - 148,800pps 10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP
Led Indicators	Per Port: Link/Act, PoE Act/Status Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 15.4 W Max Per Port 16 Ports at Full 15.4 W Output Supported
Power Consumption	260 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	3.8 kg
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-1616E	16	16	N/A
FPS-1616ME	16	16	Yes

FPS-7882E / FPS-7882ME
8 Port 10M/100M Rack-Mount Switch Hub

FPS-7882E / FPS-7882ME

FPS-7882E / ME

is 8-port 10M/100M PoE + ports and 2 Combo Gigabit UTP/SFP open slot PoE Web Smart Fast Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 8-port 10/100M PSE PoE + (PoE ON/OFF Function) and 2 Combo Gigabit UTP port/SFP
- Web-based Configuration and Management
- 19" Rack-Mount
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Internal Power Supply

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-7882E/ME features 8-port PoE IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 110~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding FPS-7882E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat.5/Cat.5e Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Exceptionally Smart

FPS-7882 PoE Web Smart Fast Ethernet Switch features management ports that can be managed through Web Browser and provides Smart features that are ideal for simple QoS/CoS applications and basic monitoring tools to improve network efficiency. Its security and management features such as bandwidth control, and VLAN to secure your network. Through a Web-based interface, an administrator can set up VLANs to segregate traffic, QoS to prioritize mission-critical data and link aggregation to create high bandwidth. All of these features offer extra protection on the network edge. Best of all, the password-protected configuration interface can be accessed remotely.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps/ 100Mbps/1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps/2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-7882E	8	8	N/A
FPS-7882ME	8	8	Yes

Technical Specifications:

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT IEEE 802.3z 1000BaseX IEEE 802.3x Flow Control IEEE 802.3ad Trunk (Link Aggegation) IEEE 802.3at PoE IEEE 802.1q VLAN (Port Based and Tag Based) IEEE 802.1p Class of Service, Priority Protocols IEEE 802.1x Port Security IEEE 802.1d Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol
Features	Number of Ports: 8-port PoE+ MAC Address: 4K Buffer Memory: 2.75M bits Transmission Method: Store and Forward Switch Capacity: 1.6Gbps
Smart Features	Port VLAN: 8 Tagged VLAN: 4094 Trunk Groups: 2 (1~4 port for each group) Quality of Service: up to 4 queues PoE function ON/OFF Remote Control STP/RSTP (Spanning Tree Protocol and Rapid Spanning Tree Protocol) MAC Filtering IGMP Snooping Management: Broadcast Strom Control, Bandwidth Control, Port Mirroring, Password-protected Access, Port Settings, Web-base Management, Graphic User Interface…etc.
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5e UTP/STP
Led Indicators	Per Port: Link/Act, PoE Act/Status Per Unit: Power
Power Input	100~240V/AC, 50~60Hz
Power Output	48V/DC Per Port Output – 8 Ports at Full 30 W Output Supported per port
Supply Power up to	130/260 Watts (Max)
Dimensions	440 x 220 x 44 mm (L x W x H)
Weight	2.7 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

FPS-7082E / FPS-7082ME
8 port 10M/100M/1000M Rack-Mount Gigabyte Ethernet Switch Hub

FPS-7082E / FPS-7082ME

FPS-7082E / ME

is a 8-port 10/100/1000M PoE+ with 2 SFP Gigabit Web- Managed Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 8-Port 10/100/1000M IEEE 802.3 at PSE, 2 SFP Open Slots (POE ON/OFF Function)
- 19" Rack-Mount Metal Case
- IEEE 802.1Q VLAN Tagging
- 802.1p Priority Queues
- Jumbo Frames and IGMP Snooping Support
- Link Aggregation and Rapid Spanning Tree
- Internal Power Supply

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-7082E/ME features 8-port PoE+ IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding FPS-7082E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

High-Speed Networking and Jumbo Frames Support

FPS-7082 provides an excellent solution for expanding your Gigabit network. By Gigabit speed, this product provides high flexibility and high bandwidth connectivity to servers, workstations and other attached devices. It enables you to save time transferring large files. In addition, it also supports Jumbo Frames 9.6K to improve network utilization of large file transfers.

Exceptionally Smart

FPS-7082 provides Smart features that are ideal for simple QoS/CoS applications and basic monitoring tools to improve network efficiency. Its security and management features, such as VLAN (IEEE 802.1Q VLAN tagging and port-based VLAN) to secure your network. Through a Web-based interface, an administrator can set up VLANs to segregate traffic, QoS to prioritize mission-critical data and link aggregation to create fat traffic pipelines. In addition, FPS-7082 also supports Rapid Spanning Tree to detect and break unintentional cabling loops within the network. All of these features offer extra protection on the network edge. Best of all, the password-protected configuration interface can be accessed remotely.

Advanced Security

FPS-7082 supports IEEE802.1x port authentication.

Enterprise-Class Web Management Utility

With graphic user interface, it's easy to manage, plan and configure FPS-7082 Gigabit Web Smart Ethernet Switch. This utility provides valuable tools, such as,
Configuration List:
The configuration features of the Web Management utility allows the system administrator to set the IP Address, the user name and the password of FPS-7082.
Monitoring List and Statistic View:
FPS-7082 can be monitored for every status by the system administrator. When an abnormal event occurs on the switch, messages can be set to notify the system administrator.
Maintenance List:
The system can easily maintain FPS-7082 by updating every status.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat.5/Cat.5e Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps/ 100Mbps/1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps/2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Flow Control IEEE 802.3at PoE IEEE 802.1x Port Authentication IEEE 802.1Q VLAN Tagging IEEE 802.3ad Port aggregation IEEE 802.1d Spanning tree protocol IEEE 802.1w Rapid Spanning tree protocol IEEE 802.1p Class of Service, Priority Protocols
Features	RJ-45 Ports: 8 SFP Open Slots: 2 MAC Address: 8K Buffer Memory: 144K Bytes Jumbo Frames: 9.6K Transmission Method: Store and Forward Switch Capacity: 1.6Gbps
Smart Features	VLAN: 16 / Trunk Groups : 4 SNMP / Quality of Service IGMP Snooping LACP, RSTP Rate Limiting 802.1x Port-based Security Management: Port Mirroring, Password-protected Access, Port Settings, Web-base Management, Graphic User Interface
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act, 1000M Per Unit: Power
Power Requirement	100~240V/AC, 50~60Hz
Power Consumption	12 Watts (Max)
Supply Power up to	130/260 watt (Max)
Dimensions	228 x 123 x 44 mm (L x W x H)
Weight	0.95 kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-7082E	8	8	N/A
FPS-7082ME	8	8	Yes

FPS-7164E / FPS-7164ME
16 port 10M/100M/1000M Rack-Mount Gigabyte Ethernet Switch Hub

FPS-7164E / FPS-7164ME

FPS-7164E / ME

is a 16-port 10/100/1000M PoE+ with 4 Combo SFP Gigabit Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 16-Port 10/100/1000M IEEE 802.3 at PSE, 4 SFP Open Slots
- 19" Rack-Mount Metal Case
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Internal Power Supply

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-7164E/ME features 16-port PoE+ IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding FPS-7164E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat.5/Cat.5e Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps/ 100Mbps/1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps/2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Flow Control IEEE 802.3at PoE
Features	RJ-45 Ports: 16 SFP Open Slots: 4 MAC Address: 8K Buffer Memory: 500K Bytes Transmission Method: Store and Forward Switch Capacity: 3.2Gbps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act, PoE: Act/Status Per Unit: Power
Power Requirement	100~240V/AC, 50~60Hz
Supply Power up to	390 Watts (Max)
Dimensions	440 x 330 x 44 mm (L x W x H)
Weight	4.1kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-7164E	16	16	N/A
FPS-7164ME	16	16	Yes

FPS-7242E/FPS-7242ME
24-port 10/100M PoE+2 Combo Gigabit Copper /2 SFP Rack-mount Gigabit Ethernet Switch

FPS-7242E / FPS-7242ME

FPS-7242E / ME

is 24-port 10/100M + 2 Combo Gigabit Copper / 2 SFP Rack-mount Gigabit Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 24-Port 10/100BaseT(X) PoE
- 2-Port Gigabit Copper and 2 SFP Open Slots
- IEEE 802.3 at
- Web Management
- 19" Industrial Size
- Internal Power Supply

2 Combo Gigabit Copper / 2 SFP Open Slots

FPS-7242E/ME supports 2 Combo Gigabit Copper or 2 SFP open slots to uplink to servers, storage, or other switching devices for long loop reach applications

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-7242 features 24-port PoE+ IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding FPS-7242 to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps, 100Mbps, or 1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200 or 2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3 af/at IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Full-duplex and Flow Control
Features	Number of Ports: 10/100BaseTX with RJ-45 Connectors: 24 10/100/1000BaseT with RJ-45 Connectors: 2 Combo SFP Open Slots: 2 MAC Address: 4K Buffer Memory: 2.75Mb Transmission Method: Store and Forward Switch Capacity : 5.6Gbps
Filtering/Forwarding Rates	1000Mbps port – 1,488,000pps 100Mbps port - 148,800pps 10Mbps port - 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act Per Unit: Power
Power Requirement	90~260V/AC, 50~60Hz
Power Consumption	390 Watts (Max)
Dimensions	440 x 332 x 44 mm (L x W x H)
Weight	3.3 kg
Operating Temperature	0 to 45°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-7242E	24	24	N/A
FPS-7242ME	24	24	Yes

FPS-7244VE / FPS-7244VME
24 Port 10M/100M/1000M Rack-Mount Gigabyte Ethernet Switch Hub

FPS-7244VE / FPS-7244VME

FPS-7244VE / VME

is a 16-port 10/100/1000M PoE+ with 4 Combo SFP Gigabit Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 24-Port 10/100/1000M IEEE 802.3 at PSE, 4 SFP Open Slots
- 19" Rack-Mount Metal Case
- Auto-MDI/MDI-X
- Auto-Negotiation
- Non-Blocking
- Internal Power Supply

IEEE 802.3at Power over Ethernet (PoE) ports

FPS-7244VE/VME features 16-port PoE+ IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 90~260V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding FPS-7244VE/VME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

No Special Networking Cable Required

By adding PoE devices, you can use an existing standard Cat.5/Cat.5e Ethernet cable without a new electrical outlet for both power and data. It helps you reduce installation time and cost.

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps/ 100Mbps/1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200Mbps/2000Mbps of band-width in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Flow Control IEEE 802.3at PoE
Features	RJ-45 Ports: 24 SFP Open Slots: 4 MAC Address: 8K Buffer Memory: 500K Bytes Transmission Method: Store and Forward Switch Capacity : 5.6Gbps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5E UTP/STP
Led Indicators	Per Port: Link/Act, PoE: Act/Status Per Unit: Power
Power Requirement	100~240V/AC, 50~60Hz
Power Consumption	390 Watts (Max)
Dimensions	440 x 330 x 44 mm (L x W x H)
Weight	4.1kg
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-7244VE	24	24	N/A
FPS-7244VME	24	24	Yes

FPS-2422E / FPS-2422ME
24 Port 10M/100M Rack-Mount Ethernet Switch Hub

FPS-2422E / FPS-2422ME

FPS-2422E / ME

is 24-port 10/100M + 2 Combo Gigabit Copper / 2 SFP Rack-mount Gigabit Ethernet Switch that is designed for medium or large network environment to strengthen its network connection. Including rack-mount brackets, the 19" size fits into your rack environment. It is a superb choice to boost your network with better performance and efficiency.

Key Features

- 24-Port 10/100BaseT(X) POE
- 2-Port Gigabit Copper and 2 SFP Open Slots
- IEEE 802.3af
- Web Management
- 19" Industrial Size
- Internal Power Supply

IEEE 802.3af Power over Ethernet (PoE) ports

FPS-2422E/ME features IEEE 802.3af Power over Ethernet (PoE) ports supplying Maximum 390 Watt. This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3af compliant, or only the data will be sent through LAN cable. By adding FPS-2422E/ME to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

2 Combo Gigabit Copper / 2 SFP Open Slots

FPS-2422E/ME supports 2 Combo Gigabit Copper or 2 SFP open slots to uplink to servers, storage, or other switching devices for long loop reach applications

Auto-MDI/MDI-X

Every port can automatically sense your type of cable, so there is no need for crossover cables whether you are connecting this switch to another switch or to a computer.

Auto-Negotiation

Every port can automatically sense if the connected network devices are running at 10Mbps, 100Mbps, or 1000Mbps and Half/Full-Duplex mode, and adjust accordingly.

Non-Blocking

This switch receives and forwards traffic seamlessly with its non-blocking wire-speed. Every port simultaneously supports up to 200 or 2000Mbps of bandwidth in full-duplex mode. This feature provides full wire speed to the connected devices and allows you to run a smooth network.

Store and Forward

By this function, this switch can maximize network performance while minimizing the propagation of bad network packets.

Technical Specifications:

Standards	IEEE 802.3af IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.ab 1000BaseT IEEE 802.3z 1000BaseSX/LX
Features	IEEE 802.3x Full-duplex and Flow Control Number of Ports: 10/100BaseTX with RJ-45 Connectors: 24 10/100/1000BaseT with RJ-45 Connectors: 2 Combo SFP Open Slots: 2 MAC Address: 4K Buffer Memory: 2.75Mb Transmission Method: Store and Forward
Filtering/Forwarding Rates	Switch Capacity : 5.6Gbps 1000Mbps port – 1,488,000pps 100Mbps port - 148,800pps
Transmission Media	10Mbps port - 14,880pps 10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP
Led Indicators	1000BaseT Cat. 5E UTP/STP Per Port: Link/Act Per Unit: Power
Power Requirement	90~260V/AC, 50~60Hz
Power Consumption	390 Watts (Max)
Dimensions	440 x 332 x 44 mm (L x W x H)
Weight	3.3 kg
Operating Temperature	0 to 45°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Ordering Information

Model	POE Ports	LAN Ports	Web Managed
FPS-2422E	24	24	N/A
FPS-2422ME	24	24	Yes