

**FINE**

# CCTV Solutions & Network Management

CCTV Solutions & Network Management

**FINE**

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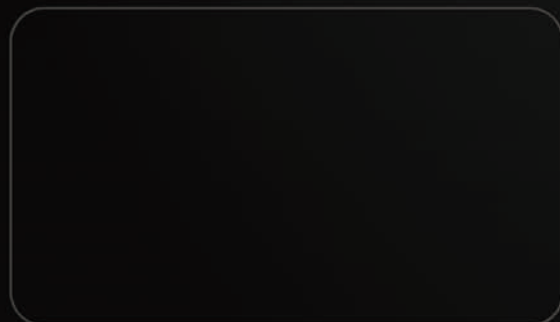
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# The Total Security Solution

Founded in the year of 1976, Finest has been a reputable and very much devoted company in CCTV. Backed with vast experiences, in manufacturing, developing and designing the world's most sophisticated CCTV equipment makes its name come to fame and known for being one of the top suppliers of CCTV in the nationwide today.

Finest strategy in the market is to offer one stop solutions for all security and CCTV products. This is possible because it has completed range of products to suit every situation and any industry. With emerging needs of surveillance and monitoring solution today, Finest seeks out technology from all corners of the world and form a strategic alliance with technology-driven manufacturing firms of different product categories in CCTV such as the Fiber Optical Transceiver devices, Twisted Pair Transceiver devices, Digital Recording systems, and IP solutions to integrate with its professional expertise.

Finest strength lies in its ability to provide turnkey solution with cost effective that are partical for customized applications. Its premium grade of services and quality, supported by a team of professionalism makes the company stronger ever.

**FINE** the name to be trusted and your partner in CCTV.....

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# STORCK SERIES

## IR HIGH SPEED DOME

### 37X, 26X, 18X OPTICAL ZOOM

SPEED DOME



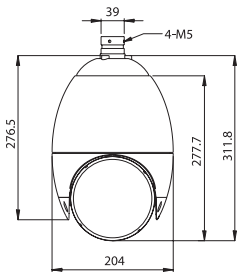
#### KEY FEATURES

- Unique Design, all in one Integrated Hi-Speed Dome
- Integrated with High Quality IR Leds, maximum distance 200M
- Powerful Mechanism Structure with shocking resistance
- 3-Level Lighting Protection
- IR Distance: 100M
- IR Distance with Laser: 200M
- IP65 Outdoor

#### TECHNICAL SPECIFICATIONS

Model	SP-PTIR737	SP-PTIR026	SP-PTIR018
Image Sensor	1/4" Exview HAD CCD	1/4" Sony Exview CCD	
TV System	795 (H) x 596 (V)	PAL: 752(H) x 582(V) ; 2:1 interlace NTSC: 768(H) x 494(V) ; 2:1 Interlace	
Optical Lens	37X optical Zoom, F= 3.5(wide) ~ 129(tele)mm	26X optical Zoom, F= 3.5(wide) ~ 91(tele)mm	18X optical Zoom, F= 4.1(wide) ~ 73.8(tele)mm
Horizontal Angle	41° ~ 1.5°	54.2° ~ 2.2°	4.8° ~ 2.8°
Digital Zoom	14X	12X	
Horizontal Resolution	560 TV Lines	560 TV Lines	560 TV Lines
Illumination	0.1 Lux	0.01 Lux	0.01 Lux
Minimum Illumination	0 Lux		
Day / Night	Day / Night / Auto		
S/N Ratio	More than 52dB	More than 50dB	More than 50dB
Shutter	1/50~1/100,000 sec.	1/1000 sec. (20 steps)	1/1000 sec. (20 steps)
Gain	-3-28dB 16steps		
Video Output	1Vp-P 75 ohm negative polarity 2:1 interlaced		
Privacy Zone	8 zones		
Wide Dynamic Range	On / Off		
Exposure Mode	Auto / Brightness first / shutter first / Iris first / Manual, Gain / Shutter are adjustable		
Video Affect	Art, B/W, Mirror, Frozen, Anti-Shaking		
White Balance	Auto / Manual / ATW		
Synchronization	Internal synchronization / power synchronization / external synchronization		
Back Light	Open / closed/auto		
Pan Range	360° continuous		
Tilt Range	186° (-93°-0°-93°) and 90°+ 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		
Protocols	AD, Pelco-D, Pelco-P, Philips, Vicon, Samsung, DS etc		
Communication Port	RS-485 1200m		
Presets	128 presets		
Touring	8 tours, 24 presets per tour, speed and time can be adjusted separately		
Track	2 Tracks, 40 seconds per track		
Swing	Horizontal & Vertical rotation, between two presets, 4 presets back & forth, rotate at any speed		
Combination Motion	2 combinations, presets, touring, track are at any Combination, speed, time can be separately		
Timing	Call the resets according to week, touring, track, combination motion, color to B/W, B/W to color, tracking, 4 period per day		
Stop & stay	Stay 1'99 mins, calling presets, touring, trace, combination motions & rotation		
Power on	Calling the motions before power off, presets, touring, combination motions, rotation, tracking		
Display	Time, date, title, coordinates, temperature, booting info, motion info		
Title	One main title, 1-16 presets title, 8 Chinese or 16 English characters		
Alarm	4 input can be extended to 8 or 16, two group output, one is N.O., one is N.C., contact capacitance is 0.5 A/24V		
After Alarm recovery	0-99 minutes		
Motion Detection	Respond to the presets		
Glass	Double layer optic glass		
Shells	ROHS aluminum		
IR Light	Automatic and stepless light regulating lights make 3 level illumination ; near, middle & far. Total power is more than 30W, effective distance is more than 200m with Laser		
Module Structure	High strength structure of integrated metal with 4 bearing		
Installation	Wall mounting, pendant mounting, various covers, brackets & power case are options		
Installation ports	40 mn 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		
Working Temperature	-50°C to 50°C		
Working Humidity	IP 65 for outdoor series		

#### MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# HIGH SPEED DOME, D/N, 700TVL, WIDE DYNAMIC



Outdoor  
SP-1036WQ



In-Ceiling  
SP-1036WI



Surface Mount  
SP-1036WS



SPEED DOME

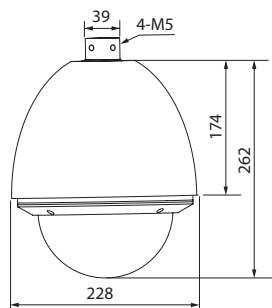
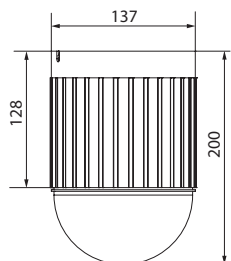
## KEY FEATURES

- More than 700TV Lines of Horizontal Resolution, with Wide Dynamic Range
- Full equipped with high sensitivity 1/4" Sony Super HAD CCD
- 8 privacy masking zones
- Day & Night +ICR for true day & night surveillance
- 4 alarm inputs, 2 outputs
- 2 pattern tours each one with up to 80 seconds of record
- 8 tours, 24 presets / tour, speed and time selectable
- 128 presets with editable time
- Baud Rate: 2400 / 4800 / 9600 bps
- Multiple protocols support
- IP66 Rated
- Multiple Language

## TECHNICAL SPECIFICATIONS

Model	SP-1036W
Image Sensor	1/4" SONY Super HAD CCD
Effective Pixels	PAL: 752(H) x 582(V) 2:1 interlace NTSC: 768(H) x 494(V) 2:1 interlace
Horizontal Resolution	700 TV Lines
Synchronization	Internal / External V-lock
Optical Lens	36X Optical Zoom, f=3.4mm(wide) – 122.4mm (tele), F1.6 -4.5
Digital Zoom	12X (up to 432X with optical zoom)
Viewing Angle	57.8°(wide end) to 1.7° (tele end)
Day & Night	Yes, day & night with Mechanical IR CUT Filter
Video Output	1.0Vp-p (sync negative) 75 ohm sync negative, interlaced
Gain Control	Auto / manual (-3 to 28dB, 16 steps)
Minimum Illumination	0.1 Lux (Color) 0 Lux: B/W
S/N ratio	≥ 50dB
White Balance	Auto, ATW, Indoor, Outdoor, One-push, Manual WB
Wide Dynamic	On / OFF
BLC	On / OFF / Auto
Privacy Masking	8 zones
AE Control	Auto / Manual / ATW
Pan	360° continuous
Tilt	186° (-93°-0°-93°) Or 90°+ auto flip selectable ELC
Pan Speed	0.05° / S - 280° / S
Tilt Speed	0.05° / S-200° / S
Preset Speed	300° / S
Baud Rate	1200 / 2400 / 4800 / 9600
Protocols	AD, PELCO-D, PELCO-P, PHILIPS, VICON, SAMSUNG, DS etc
Communication	RS-485 (1200 meters)
Swing	360: continuous clockwise or counter-clockwise ; pan+tilt, scan between 2 presets or 4 presets
Group Action	2 groups include preset, tour, pattern
Timing Action	Timing action according to the day of week; preset, tour, pattern, group, day/night, day selectable, 4 times every day
Park Action	Park time 1-99 minutes, preset, tour, pattern, group, swing selectable
Power on Action	Preset, tour, pattern, group, swing, recover
Display	Time, date, title, coordinate, temperature
Title	1 main title, -1-16 presets title, 16 characters/title
Fan	Auto / Manual
Alarm Resume	0-99 minutes
Motion Detect	Preset Response
Cover	Clear (standard)
Structure	Metal integrative or separate fast installation structure
Mount	Wall mount, pendant mount, in-ceiling, pole mount , power case
Temperature	Indoor: -5°C~ +60°C Outdoor: -50°C ~ +60°C
Power Supply	AC24V±10%, 0.25A 6W(outdoor heat consumption 24V/1A/24W)
Weight	Indoor 2.2 kgs Outdoor 4.3 kgs (without bracket)
Dimension	230(Ø) x 288.5 mm

## MECHANICAL DIMENSION



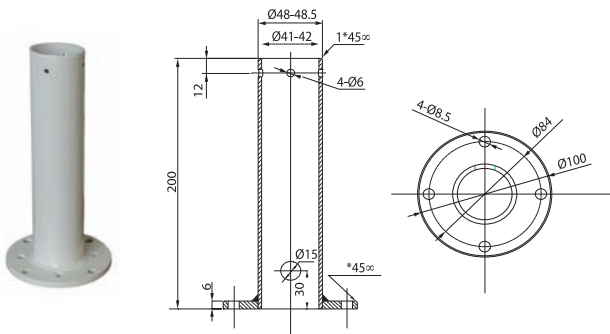
\* Specifications are subjected to change without prior notice.

# ACCESSORIES FOR STORCK SPEED DOMES

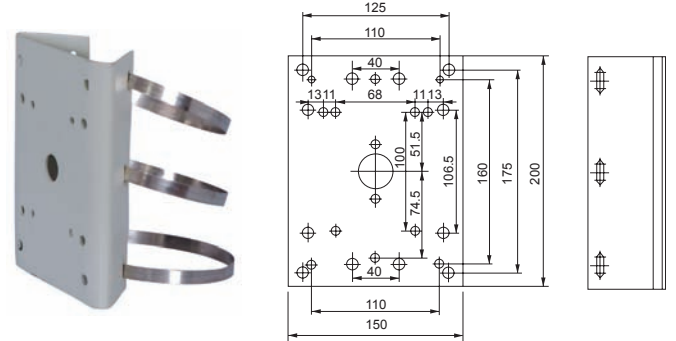
SPEED DOME



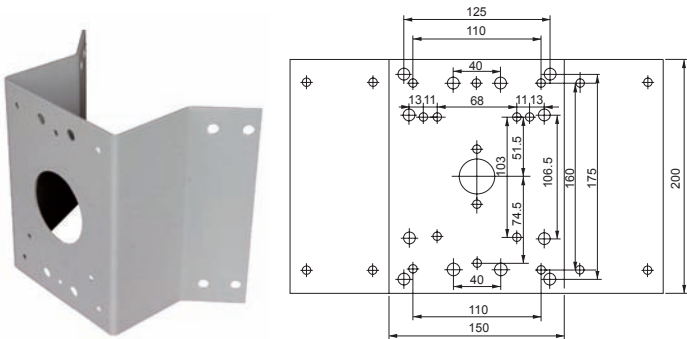
**ST-D05** Pendant Mount Bracket



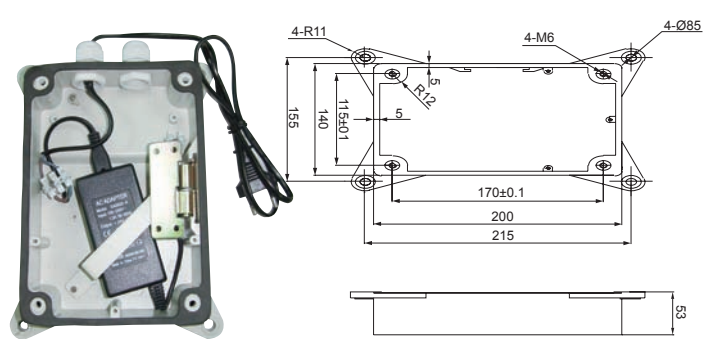
**ST-Z01** Pole Bracket



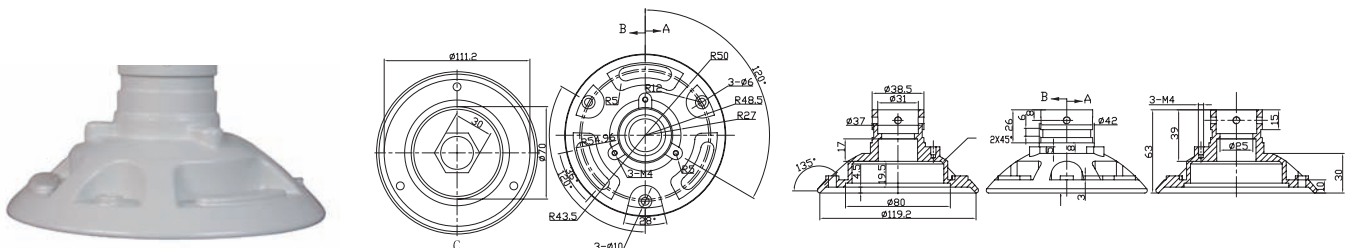
**ST-T01** Corner Bracket



**ST-HV** Power Case



**ST-AD01** Mount Adapter



# 12X MINI WDR PTZ CAMERA



**SP-1256H**  
Color / Mono. Mini PTZ Dome  
with ICR, 192X Power Zoom



**SP-1256CM**  
Color / Mono. Internal PTZ Dome  
with ICR, 192X Power Zoom



**SP-1256HW**  
Color / Mono. External Mini PTZ Dome  
with ICR, 192X Power Zoom



MINI SPEED DOME

## KEY FEATURES

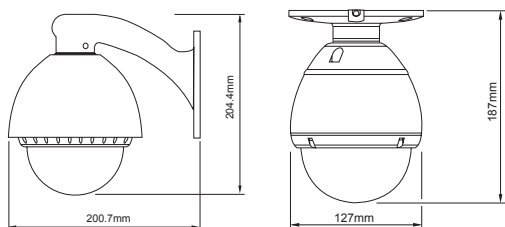
- Pan & Tilt Speed Up to 360° per second
- Support Auto-Flip, tile degree is up to 180°
- 360 Degree Rotation, 127 Preset Positions
- 8 Groups for present program
- 8 set of swing action
- Support 4 Pattern
- 8 Privacy Zones
- 1/4" Interline Transfer CCD
- F1.67~1.88, f=3.94~46.05mm, auto IRIS Lens
- 12X Optical zoom, 16x digital zoom, total 192X zoom
- Support Day / Night function
- IR Cut Filter Removable
- AGC, ALC, AES, BLC, AWB, detection zones
- Built in Fan and Heater (SP-1256HW)
- 4 alarm input (SP-1256HW)

## TECHNICAL SPECIFICATIONS

Model	SP-1256H	SP-1256CM	SP-1256HW
Pick Up Device	1/4"Interline Transfer CCD		
Effective Pixels	N: 768(H)× 494(V)380K ; P: 752(H)× 582(V)440K		
S/N	52 dB (AGC Off)		
Horizontal Resolution	600 TV Line(Color),680 TV Line(B/W)		
Lens	F1.67~1.88, f=3.94~46.05mm		
Zoom	12x Optical zoom, 16x Digital Zoom, total 192x zoom		
White Balance	ATW or AWB R / B Gain Level adjustable		
IRIS	Auto / Manual		
AGC	Normal / High / Off		
BLC Function	Low / Middle / High / Off		
ICR Function	YES		
Illumination	0.2 Lux(Color) / 0.02 Lux (B/W), 50 IRE		
Shutter Speed	1/60~1/120000 sec(N); 1/50 ~ 1/120000 sec(P)		
Flicker less	Low / Middle / High / Off		
Focus	Auto / Manual / SemiAuto		
Pan	360 (Endless)		
Tilt	180 (Auto-Flip), 95 (Normal)		
Preset	127 Preset ; Auto Speed:300 /sec , manual: 0.05~300 sec		
Pattern	4 Pattern, 1200 commands(about 5 min)		
Swing	8 Swing / Speed: 1~180 /sec		
Group	8 Group (20 action entities per Group)		
Alarm	-n/a-	-n/a-	Yes
Fan & Heater	-n/a-	-n/a-	Yes
Operation Temperature	0 °C ~ 40 °C	0 °C ~ 40 °C	-30 °C ~ 50 °C
Power Source	DC 12V		

• Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



## ACCESSORIES



**VD-B1048**  
Wall Mount Bracket



**VD-B1048C**  
Ceiling Straight Bracket



**KB-1048S**  
PTZ Keyboard



**KB-1054S**  
3D PTZ Keyboard

# MINI INDOOR DOME VARI-FOCAL LENS

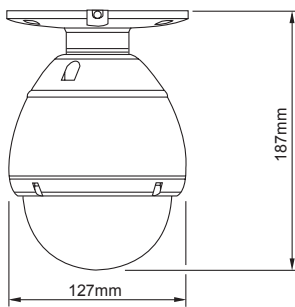


MINI SPEED DOME

## KEY FEATURES

- 1/3" Colour SONY Super HAD CCD DSP Camera
- 2.8-11mm, 3.7-12mm, 9-22 mm Auto IRIS Lens
- 600 TV Lines; 0.001 Lux
- IR Sensitive (Day & Night)
- Auto White Balance (AWB)
- Auto Gain Control (AGC)
- Back-Light Compensation (BLC)
- 360 Degree Rotation, 32 Preset Positions
- Pan Speed Up to 30°/S, Tilt Speed Up To 30°/S
- 6 Auto Cruising Track

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	SP-PV600-9 (9-22mm)	SP-PV600-28 (2.8-11mm)	SP-PV600-37 (3.7-12mm)
Scanning System	1:2 Interlace		
Pick Up Device	1/3" SONY Super HAD CCD		
Effective Pixels	NTSC: 510(H) x 492(V) / PAL: 500(H) x 582(V)		
S/N	60dB (r=1, AGC OFF, Aperture=OFF, Luminance signal)		
Horizontal Resolution	600 TV Lines		
Lens	F1.6 f= 9 - 22 mm / Auto IRIS	F1.4 f= 2.8-11 mm / Auto IRIS	F1.6 f= 3.7-12mm / Auto IRIS
Zoom	Manual		
White Balance	ATW		
HDR WDR	Yes		
ALC	Auto		
AGC	Auto Gain Control (+18dB Max.)		
BLC Function	Auto		
ICR Function	yes		
Illumination	0.001 Lux (AGC ON)		
Video Signal Output	1.0 Vp-p / 75Ω		
Gamma Correction	0.45 / 1		
Electronic Shutter	AES: 1/60(1/50) ~ 1/120,000 sec.		
External Control	RS-485		
Pan	Speed 0.5~30 °/s		
Tilt	Speed 0.5~30 °/s		
Preset	32 Preset Positions (Max)		
Auto Cruise	6 Auto Cruising Tracks (Max)		
Operating Temperature	-30°C~50°C		
Operating Humidity	Within 85% RH		
Power Source	DC12V +/- 1.0V, 6 W (max)		
Dimensions	Ø127 x 187(H) mm		

• Specifications are subjected to change without prior notice.

## ACCESSORIES



**VD-B1048**  
Wall Mount Bracket



**VD-B1048C**  
Ceiling Straight Bracket



**KB-1048S**  
PTZ Keyboard



**KB-1054S**  
3D PTZ Keyboard



# MINI OUTDOOR PAN/ TILT VARIFOCAL DOME



MINI SPEED DOME

## KEY FEATURES

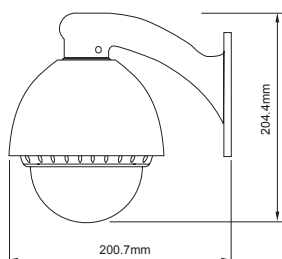
- 1/3" CCD Image Sensor (Hi-Resolution)
- 600 TV Lines; 0.001 Lux
- IR Sensitive (Day & Night)
- AWB / AGC / BLC
- 360 Degree Rotation, 32 Preset Positions
- Pan Speed Up to 30°/S, Tilt Speed Up To 30°/S
- 6 Auto Cruising Track, RS-485 Protocols Communication

## TECHNICAL SPECIFICATIONS

Model	SP-PVD600W-37	SP-PVD600W-9	SP-PVD600WD-37	SP-PVD600WD-9
SYNC System	Internal			
Scanning System	1:2 Interlace			
Pick Up Device	1/3" CCD Image Sensor (Hi-Res)			
Effective Pixels	PAL:752(H) x 582(V)			
S/N	56Db (r=1, AGC OFF, Aperture=OFF, Luminance signal)			
Horizontal Resolution	600 TV Lines			
Lens	3.7-12mm	9-22mm	3.7-12mm	9-22mm
Zoom	X			
White Balance	ATW			
HDR (Digital WDR)	-n/a-	-n/a-	Yes	Yes
WDR	-n/a-	-n/a-	Yes	Yes
ALC	Auto			
AGC	Auto Gain Control (+18dB Max.)			
BLC Function	Auto			
Illumination	0.001 Lux (AGC ON)			
Video Signal Output	1.0 Vp-p / 75Ω			
GAMMA Correction	0.45 / 1			
Electronic Shutter	AES: 1/60(1/50) ~ 1/120,000 sec.			
External Control	RS-485			
Protocol	Pelco D/P			
Pan	Speed 0.5~30 °/s			
Tilt	Speed 0.5~30 °/s			
Preset	32 Preset Positions (Max)			
Auto Cruise	6 Auto Cruising Tracks (Max)			
Operation Temperature	-10°C~50°C			
Operation Humidity	Within 85% RH			
Power Source	DC12V +/- 1.0V , 6 W (max)			

• Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



## ACCESSORIES



**VD-B1048**  
Wall Mount Bracket



**VD-B1048C**  
Ceiling Straight Bracket



**KB-1048S**  
PTZ Keyboard



**KB-1054S**  
3D PTZ Keyboard

# WIDE DYNAMIC CAMERA (EFFIO-WDR)

WIDE DYNAMIC

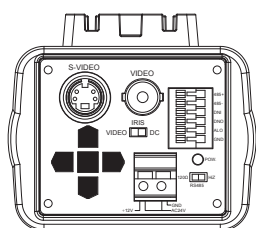


Sony Effio WDR 680TVL

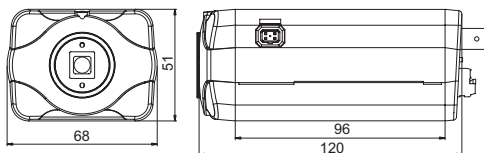
## KEY FEATURES

- 1/3" Hyper Wide Dynamic Infrared Camera (Effio WDR)
- Color: 680TVL, B/W:700TVL
- Color: 0.03 Lux @F1.0 , B/W: 0.01 Lux@F1.0, Sense up:0.0001Lux@F1.0
- Multi-Language OSD Control / RS485 Control
- RS485 Interface OSD Control by Pelco -D, Pelco -P
- Powerful 510X WDR (54dB)
- Ideal for Backlight Environments
- 2D/3D Noise Reduction & Sense Up (512x) Function
- Shutter Mode (Schedule/ Day & Night)
- Face Detection of up to 4 faces
- E-Zoom Function (1~256x)
- Advanced Motion Detection Function
- Polygonal Mosaic Privacy Mask
- Freeze / Timer Clock

## REAR PANEL



## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	CT-WD1680	CT-WD1680-ICR
Image Sensor	1/3" Sony 960H Double Speed (double density)CCD	
Number of Total Pixels	1024(H)×596(V) PAL 1028(H)×508(V) NTSC	1024(H)×596(V) PAL 1028(H)×508(V) NTSC
Horizontal Resolution	Color:680TVL, B/W:700TVL	
DSP	Sony Effio WDR	
Minimum Illumination	Color:0.03Lux@F1.0, B/W:0.01Lux@F1.0,0.005 Lux @F1.0 (With ICR), Sense up: 0.0001 Lux @F1.0	
Wide Dynamic Range	510x Normal Camera (54dB)	
Video Output	1.0Vp-p Composite, 75Ω , S-Video (Y/C)	
Video Connector	BNC	
Signal To Noise Ratio	More than 52dB (AGC Off, Weight On)	
Gamma Correction	0.45	
Mechanical IR Cut Filter (ICR)	-n/a-	Automatically Switches ( Switching Lux Level can be adjusted)
IR LEDS	-n/a-	Compatible with Infrared Illuminator
Menu	OSD Control	
Title	Title (Location)	
Synchronizing System	Internal	
Digital Day&Night Mode	Color / B&W / Auto / EXT / Schedule	
Electronic Shutter	Auto (1/50(60) ~1/100,000 sec.) / Schedule or Day & Night / : 1/50(60), FL 1/120(100) , 1/200, 1/250, 1/350, 1/500, 1/750, 1/1,000 , 1/1,500, 1/2,000, 1/3,000, 1/4,000 , 1/10,000, 1/30,000, 1/60,000, 1/100,000 sec.	
Automatic Gain Control	Auto / Manual / Off	
Back Light Compensation	WDR / BLC / OFF	
White Balance	ATW / AWB/ AWC (Push Lock) / Manual / Outdoor (1800°K ~ 10500°K) / Indoor (4500°K~8500°K)	
Flickerless	On/Off	
Dynamic Noise Reduction	3D / 2D	
Sensitivity up	Auto (Limit x2 ~x 512) / Off	
Face Detection	4 Face Detection	
Language	ENGLISH / TRADITIONAL CHINESE / SIMPLIFIED CHINESE	
E-zoom	x1 ~x256 , Pan/ Tilt Adjustable	
Motion Detection	ON / OFF (24x16 Zones, Alarm)	
Privacy	ON / OFF (16 Zones Programmable, Polygonal Mosaic)	
Timer Clock	Year/Month/ Date, Hour/Minute/Second	
Camera Control Interface	RS485 Interface OSD Control by Pelco-D, Pelco-P	
Automatic IRIS/Connector	Video / DC ; D4 IRIS Jack	
Lens Mount	C/CS Mount (with adaptor)	
Water Resistance	-n/a-	
Max. Breaking Strength	-n/a-	
Power Supply	12Vdc/24Vac (10.8~39Vdc/24Vac)	
Power Consumption	3.0W	
Operating Temperature	-10°C~50°C	
Storage Temperature	-20°C~60°C	
Operating Humidity	Maximum: RH80%	
Storage Humidity	RH90%	
Net weight	350 g	
Dimension	68(W) x 51(H) x 120(L)mm	

\* Specifications are subjected to change without prior notice.

# DIGITAL WIDE DYNAMIC CAMERA (EFFIO-E)



Digital WD  
610TVL

DIGITAL WIDE DYNAMIC

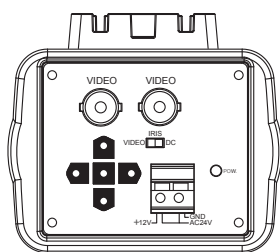
## KEY FEATURES

- 1/3" Digital Wide Dynamic Color Camera (Sony Effio-E)
- Color: 610TVL, B/W:630TVL
- Color: 0.05Lux@F1.0, B/W:0.03Lux@F1.0, 0.01Lux @F1.0 (with ICR)
- Multi-Language OSD Control
- ATR Digital Powerful 128X WDR (52dB)
- Anti-Headlight (HLC)
- 2D Noise Reduction
- High Contrast Images
- Ideal for Backlight Environments
- Mosaic Privacy Mask
- Advanced Motion Detection Function
- Picture Quality Adjustable (Contrast/Sharpness/Hue/Gain)

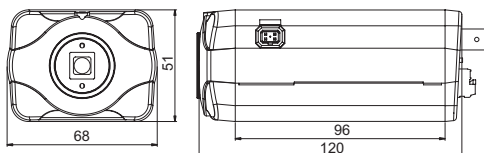
## TECHNICAL SPECIFICATIONS

Model	CT-1480	CT-1480-ICR
Image Sensor	1/3" Sony 760H Super HAD CCD	
Number of Total Pixels	795(H)×596(V) PAL 811(H)×508(V) NTSC	795(H)×596(V) PAL 811(H)×508(V) NTSC
Horizontal Resolution	Color:610TVL, B/W:630TVL	
DSP	Sony Effio E	
Minimum Illumination	Color:0.05Lux@F1.0, B/W:0.03Lux@F1.0, 0.01 Lux @F1.0 (With ICR)	
Wide Dynamic Range	128x Normal Camera (52dB)	
Video Output	1.0Vp-p Composite, 75Ω , S-Video (Y/C)	
Video Connector	BNC	
Signal To Noise Ratio	More than 52dB (AGC Off, Weight On)	
Gamma Correction	0.45	
Mechanical IR Cut Filter (ICR)	-n/a-	Automatically Switches ( Switching Lux Level can be adjusted)
IR LEADS	-n/a-	Compatible with Infrared Illuminator
Menu	OSD Control	
Title	Title (Location)	
Synchronizing System	Internal	
Digital Day&Night Mode	Color / B&W / Auto	
Electronic Shutter	AUTO (1/50(60)~1/100,000sec.) / MANUAL: 1/50(60), FL 1/120(100), 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000sec	
Automatic Gain Control	Auto (4 Steps)	
White Balance	ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK	
Back Light Compensation	WDR / BLC/Off	
Flickerless	On/Off	
Dynamic Noise Reduction	2D	
Sensitivity up	-n/a-	
Face Detection	-n/a-	
Language	ENGLISH / JAPANESE / GERMAN / FRENCH / RUSSIAN / PORTUGUESE / SPANISH / SIMPLIFIED CHINESE	
E-zoom	-n/a-	
Motion Detection	ON / OFF (24x16 Zones, Alarm)	
Privacy	ON / OFF (16 Zones Programmable, Polygonal Mosaic)	
Timer Clock	-n/a-	
Camera Control Interface	-n/a-	
Automatic IRIS ; Connector	Video / DC ; D4 IRIS Jack	
Lens Mount	C/CS Mount (with adaptor)	
Water Resistance	-n/a-	
Max. Breaking Strength	-n/a-	
Power Supply	12Vdc/24Vac (10.8~39Vdc/24Vac)	
Operating Temperature	-10°C~50°C	
Storage Temperature	-20°C~60°C	
Operating Humidity	Maximum: RH80%	
Storage Humidity	RH90%	
Net weight	350 g	
Dimension	68(W) x 51(H) x 120(L)mm	

## REAR PANEL



## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# DIGITAL WD BOX CAMERA

## SONY EFFIO-E

DIGITAL WIDE DYNAMIC

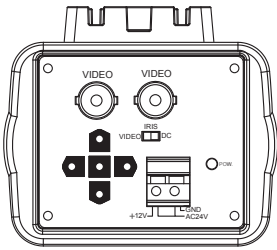


Digital WD  
680TVL

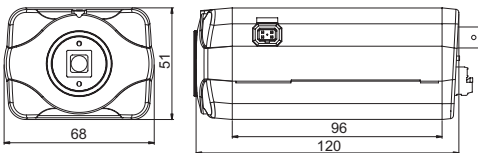
### KEY FEATURES

- 1/3" Digital Wide Dynamic Color Camera (Sony Effio-E)
- Color:680TVL, B/W:700TVL
- Color: 0.03Lux@F1.0, B/W:0.01Lux@F1.0, 0.005Lux @F1.0 (with ICR)
- Mechanical Focus Adjustment
- Multi-Language OSD Control
- ATR Digital Powerful 128X WDR (52dB)
- Anti-Headlight (HLC)
- 2D Noise Reduction
- High Contrast Images
- Ideal for Backlight Environments
- Mosaic Privacy Mask
- Advanced Motion Detection Function
- Picture Quality Adjustable (Contrast/Sharpness/Hue/Gain)

### REAR PANEL



### MECHANICAL DIMENSION



### TECHNICAL SPECIFICATIONS

Model	CT-1880DR	CT-1880DR-ICR
Image Sensor	1/3" Sony 960H Exview CCD	
Number of Total Pixels	1024(H)×596(V) PAL 1028(H)×508(V) NTSC	1024(H)×596(V) PAL 1028(H)×508(V) NTSC
Horizontal Resolution	Color:680TVL, B/W:700TVL	
DSP	Sony Effio-E	
Minimum Illumination	Color:0.03Lux@F1.0, B/W:0.01Lux@F1.0, 0.005 Lux @F1.0 (With ICR)	
Wide Dynamic Range	ATR Digital WD (ATR:Adaptive Tone-curve Reproduction) ; 128x Normal Camera (52dB)	
Video Output	1.0Vp-p Composite, 75Ω	
Video Connector	BNC	
Signal To Noise Ratio	More than 52dB (AGC Off, Weight On)	
Gamma Correction	0.45	
Mechanical IR Cut Filter (ICR)	-n/a-	Automatically Switches (Switching Lux Level can be adjusted)
IR LEDs	-n/a-	Compatible with Infrared Illuminator
Menu	OSD Control	
Title	Title (Location)	
Synchronizing System	Internal	
Digital Day&Night Mode	Color / B&W / Auto / EXT	
Electronic Shutter	AUTO (1/50(60)~1/100,000sec.) / MANUAL: 1/50(60), FL 1/120(100), 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000sec.	
Automatic Gain Control	Auto (4 steps)	
White Balance	ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK	
Back Light Compensation	HLC / BLC / OFF	
Flickerless	On/Off	
Dynamic Noise Reduction	2D	
Sensitivity up	-n/a-	
Face Detection	-n/a-	
Language	ENGLISH / JAPANESE / GERMAN / FRENCH / RUSSIAN / PORTUGUESE / SPANISH / SIMPLIFIED CHINESE	
E-zoom	-n/a-	
Motion Detection	ON / OFF (24x16 Zones, Alarm)	
Privacy	ON / OFF (8 Zones Programmable, Polygonal Mosaic)	
Timer Clock	-n/a-	
Camera Control Interface	-n/a-	
Automatic IRIS ; Connector	Video / DC ; D4 IRIS Jack	
Lens Mount	C/CS Mount (with adaptor)	
Water Resistance	-n/a-	
Max. Breaking Strength	-n/a-	
Power Supply	12Vdc/24Vac (10.8~39Vdc/24Vac)	
Power Consumption	3.0W	
Operating Temperature	-10°C ~ 50°C	
Storage Temperature	-20°C ~ 60°C	
Operating Humidity	Maximum: RH80%	
Storage Humidity	RH90%	
Net weight	350 g	
Dimension	68(W) x 51(H) x 120(L)mm	

\* Specifications are subjected to change without prior notice.

# FULL HD BULLET CAMERA



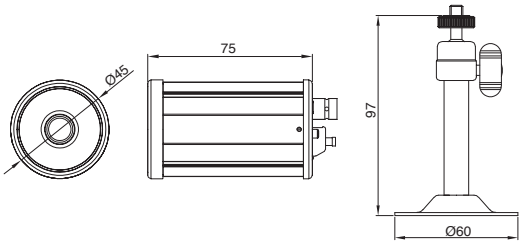
## KEY FEATURES

- 2.1Mpx., 1/3" PANASONIC CMOS 1080p (1920X1080) @30FPS (Standard)
- HD-SDI(BNC)/Service Video Output
- Min. illumination of 1.0Lux
- F=3.6/6mm Board lens
- True Day & Night with ICR Mechanism
- WDR (Wide Dynamic Range)
- DSS (Digital Slow Shutter)
- AGC.BLC, 3DNR
- Convenient OSD
- DC12V

## TECHNICAL SPECIFICATIONS

Model	HD-B450M
Image Device	2.1 Mega Pixel, 1/3" Panasonic Color CMOS
DEffective Pixels	1944(H) x 1092(V)
Unit cell size	2.75um(H) x 2.75um(V)
Video Output	SDI: 1080p 30FPS/720P 60fps TV Out: CVBS NTSC/PAL
Min. Illumination	1.0Lux
S/N Ratio	More than 50dB
Shutter Speed	Auto/Manual selectable 1/30(25), 1/60(50), 1/120, 1/250, 1/700 1/1K, 1/1.6K, 1/2.5K, 1/5K, 1/7K, 1/10K, 1/30K
Lens	F=3.6mm/6mm Board Lens
White Balance	AUTO/PUSH LOCK/MANUAL
AGC	0-23 dB
BLC	On/Off (by OSD)
WDR	Supported
3DNR	Supported
DSS	Supported
Motion Detection	Supported
Mirror Mode	Supported (H/V/HV)
Day & Night	AUTO/COLOR/BW
OSD	Built-in with Joystick
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-20°C ~ +70°C
Power Consumption	DC12VMax: 160mA
Dimension	45 x 75 mm
Weight	Approx: 145g

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# FULL HD BULLET OUTDOOR IR CAMERA

BULLET CAMERA



## KEY FEATURES

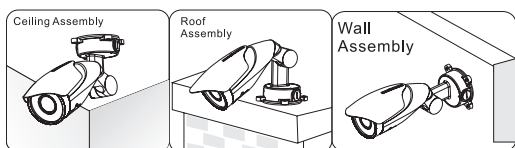
- 2.1MP CMOS Image Sensors
- Full HD1080p Digital Images
- HD-SDI Output Interface
- Broadcast Style Transmission over
- Coaxial Cable (No Networking Required)
- Uncompressed Images (Zero Latency)
- 20 IR LEDs (2 Big, 18 5Ø, 50m Illumination\*)
- Mechanical IR Cut-Filter
- Digital Noise Reduction
- O.S.D. Menu
- Selectable Gain Control
- Selectable White Balance
- Selectable Back Light Compensation
- Privacy Function
- RS-485 Communication
- Analog Video Output
- NTSC/PAL Selectable
- No Bandwidth Issues
- Weatherproof (IP66)
- DC 12V ±10% / AC24V ±10%

## TECHNICAL SPECIFICATIONS

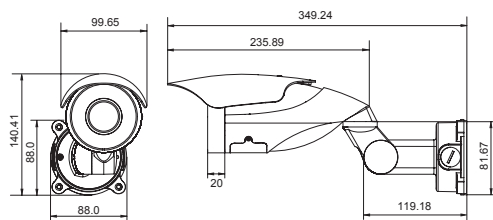
Model	HD-B6080
Image Sensor	1/2.7" 2.1MP CMOS Sensor
Scanning System	Progressive Scan
Resolution	2.1 Megapixel 1080p, 1920 x 1080 (30FPS)
Sensitivity (F1.2)	1.0 Lux (0 Lux with IR ON)
Lens	2.8-11mm
Effective Pixels (H x V)	1944(H) x 1092(V)
S/N Ratio	>50dB
Synchronisation	Internal
Video Output (BNC Type)	HD-SDI: 1.485G/s (SMPTE292M), 1.0Vp-p ~ 75Ω
Day / Night	Auto / Colour / B&W / EXT (ICR)
3 DNR	On / Off
O.S.D.	YES, Built-in
Defog	On / Off (Fog or Rain)
Gain Control	OFF / LOW / MID / HIGH
White Balance	ATW / AWCSET / INDOOR / OUTDOOR / MANUAL
Back Light Compensation	OFF / BLC / HSBLC
Shutter	1/30 / 1/60(1/50) / FLK / 1/250....1/50000
IR LEDs & Illumination Distance	20 IR LEDs, Approximately 50 Metres in Ideal Conditions (850nm)
Privacy Function	8
IP Rating	IP66
Operating Conditions	Temperature: -10°C ~ +45°C, Humidity: 95% RH
Power Supply	DC 12V ±10% / AC24V
Power Consumption	IR OFF 400mA (Max) / IR ON 800mA (Max)
Dimensions (W x H x D)	340.5mm x 100mm x 156mm
Weight	About 850 ± 10g

\* Specifications are subjected to change without prior notice.

## 3-AXIS DESIGN



## MECHANICAL DIMENSION



# FULL HD VANDAL DOME CAMERA

VANDAL DOME



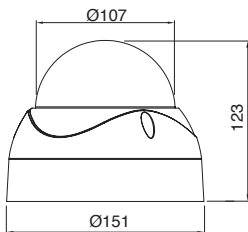
## KEY FEATURES

- 2.1MP CMOS Image Sensors
- Full HD1080p Digital Images
- HD-SDI Output Interface
- Broadcast Style Transmission over Coaxial Cable (No Networking Required)
- Uncompressed Images (Zero Latency)
- 30 IR LEDs (30M Illumination\*)
- Mechanical IR Cut-Filter
- Digital Noise Reduction
- O.S.D. Menu
- Selectable Gain Control
- Selectable White Balance
- Selectable Back Light Compensation
- Privacy Function
- RS-485 Communication
- Analog Video Output
- Weatherproof (IP66)
- DC 12V  $\pm 10\%$  / AC24V  $\pm 10\%$

## TECHNICAL SPECIFICATIONS

Model	HD-DV621K
Image Sensor	2.1 Mega Pixel, 1/3" Panasonic CMOS
Video Output mode	HD-SDI: 1080p@30fps, 1080p@25fps 720p@60fps, 720p@50fps TV Out: NTSC/PAL Selectable
Effective Pixels	1944(H) x 1092(V)
Unit cell size	2.75(H) x 2.75(V)
S/N Ratio	More than 50dB
Min illumination	0 Lux (LED ON)
Video Output (BNC Type)	HD-SDI: 1.485G/s (SMPTE292M) 1.0Vp-p-75 $\Omega$
Lens	F=3.6-16mm (F1.2) Mega Pixel Lens
Lens Control	DC IRIS
Min. Exposure time	1 / 60,000 sec
Shutter speed	Auto / Manual Selectable
WDR/BLC	OFF/WDR/BLC Selectable
AGC	0-23dB
3 DNR	OFF / LOW / MIDDLEW / HIGH
O.S.D.	YES, Built-in
IR LED	850nm, 30 ea, up to 20 M
IP Rating	IP66 (Weather Proof)
White Balance	AUTO / AUTOext / PUSH / MANUAL
Digital Zoom Ratio	1x - 20x
Digital Slow Shutter	Off, x2, x3, x4
Privacy Masking	Zone 24 ea, On / Off
Motion Detection	On / Off
Day & Night	True Day & Night With ICR Mechanism
Operating Conditions	-10°C~ +50°C, Humidity: 80% RH
Storage Temperature	-20°C ~ +70°C
Humidity	Operating: Less than 80% / Storage: Less than 95%
Power Supply	DC 12V $\pm 10\%$ Max.720mA AC24V $\pm 10\%$ Max.18W
Dimensions (W x H x D)	Bubble ( $\varnothing 107$ ), $\varnothing 151$ x 123
Weight	Approx: 950g

## MECHANICAL DIMENSION



## ACCESSORIES

### KM-WM110 Wall Mount Bracket



\* Specifications are subjected to change without prior notice.

# FULL HD BOX CAMERA

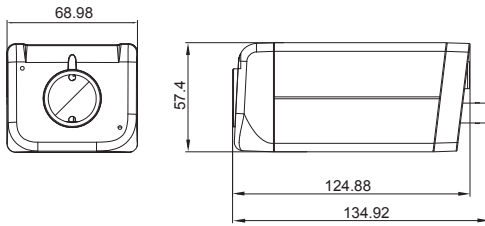
STANDARD CAMERA



## KEY FEATURES

- HD-SDI 30FPS@1080p Box Camera
- 1/2.8" 3 Megapixel Sony Progressive Color Sensor
- Supports CS/C Mount
- Noise Reduction for Enhanced Image
- Quality Even in Low Light Conditions

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	HD-380CM
Sensor	SONY 3 Megapixel Exmor CMOS
DSP	SONY HIGH QUALITY DIGITAL SIGNAL PROCESSING
Image Size	1/2.8 format interline CMOS sensor R, G, B, color complementary mosaic filter
Image System	NTSC / PAL
Scanning System	HD-SDI 1080p/60fps, 1080p/30fps, 1080i/60fps, 1080p/50fps, 1080p/25fps, 1080i/50fps, 720p/60fps, 720p/50fps
Picture Elements	3.1M
SYNC System	INT
Lens Mount	CS/C Mount
Resolution	1080p / 1080i / 720p
Minimum Illumination	0.1 LUX @ F1.4
S/N Ratio	>48 dB
Video Output	HD-SDI (BNC Type)
Gamma Correction	0.45 (Default)
OSD	Yes
Exposure Control	Auto / Manual / AIS
AES	Auto Luminance Control 1/60 ( 1/50 ) ~ 1/1000000 sec
Auto IRIS Control	DC Drive Separate Output
Auto Gain Control	0~36dB
White Balance	ATW / AWB / PTL / User / Scene Modes
Auto White Balance Range	ATW pull-in Color Temperature Range 3200 - 9500K
Backlight Compensation	Spot / Histogram / Center
Day & Night	with automatic ICR module
WDR	Yes, digital WDR
Noise Reduction	2D
Back Focus Adjust	CS Mount 12mm, +/- 1.0mm, Adjustable by Screw
Operation Temperature	-10°C ~ 50°C
Storage Temperature	-20°C ~ 70°C
Power Source	DC12V / 0.25A
Power Consumption	3 W Max
Dimension	126mm(L) x 67mm(W) x 60mm (H)
Weight	350g

• Specifications are subjected to change without prior notice.



# WIDE ANGLE DOME



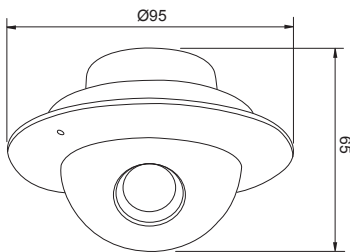
DOME CAMERA

## KEY FEATURES

- 1/4" Sony Color CCD
- 450TVL or 600 TVL with OSD
- 1.6mm Fixed Lens
- 130° Super Wide Angle

## TECHNICAL SPECIFICATIONS

### MECHANICAL DIMENSION



Model	DC-FD450	DC-FD600
Pick-up Device	1/4" Sony Color CCD	
Effective Pixels (H x V)	500(H) x 552(V)	752(H) x 582(V)
Horizontal Resolution	450 TV Lines	600 TV Lines
Minimum Illumination	0.5 Lux	0.05 Lux F1.2
S/N Ratio	More than 52db	More than 50db
D-WDR	-n/a-	OFF / ON (0-63 level adjustable)
2D-DNR	-n/a-	2: ON/OFF
Parking Line	-n/a-	Support
Day & Night	Auto / Color / B/W / EXT	Auto / Color / B/W / EXT
Mirror	ON / OFF	ON / OFF
Motion Detectionm	ON / OFF (4 areas)	ON / OFF (4 areas)
Privacy Mask	ON / OFF (8 Zones)	ON / OFF (8 Zones)
AGC	OFF / Low / Middle / High	OFF / Low / Middle / High
BLC	ON / OFF	ON / OFF
Scanning System	2:1 Interlace	
Synchronous System	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s	
Gama Characteristic	0.45	
Working Distance	20M	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens	1.6mm Lens	
View Angle	130° Super wide Angle	
Power Supply	12V DC	
Power Consumption	IR on: 330mA, IR off: 90mA	
Application	Elevator, building, Corridor, Indoor, etc.	
Case Color	White	
Operating Environment	-20°C ~ +60°C, RH95% Max	
Dimension (L x W x H)	F: 95mm x H: 65mm	
Weight	350g	

• Specifications are subjected to change without prior notice.

# MINIATURE IR DOME CAMERA

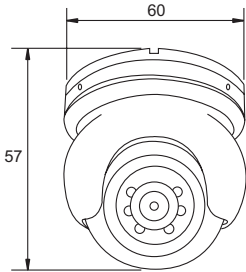
IR DOME CAMERA



## KEY FEATURES

- 1/3" Sony Super HAD CCD
- 550 TVL Horizontal Resolution
- 6 Pcs Ø5 IR Leds
- IR Distance 6-8M
- Under 5 Lux Auto Switched IR LEDs by CDS
- Electronics Day /Night

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	CF-DM828	CF-DM836
Pick-up Device	1/3" Sony Super HAD CCD	
Effective Pixels (H×V)	NTSC: 768 x 494 PAL: 752 x 582	
Sensing Area	4.9 x 3.7mm	
Horizontal Resolution	550 TV Lines	
Minimum Illumination	0.1 Lux, 0 Lux at IR on	
S/N Ratio	More than 48dB	
Scanning System	2:1 Interlace	
Synchronization	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s	
IR Distance	6 ~8 M	
IR Leds	6 pcs 850nm Infrared LED	
IR status	IR on: under 5 Lux, by CDS Auto Control	
Gamma Characteristic	0.45	
Auto Gain Control	Auto	
White Balance	Auto	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens / Angle field of View	3.6mm Board Lens Angle: 92 degree	2.5mm Board Lens Angle: 120 degree
Power Supply	12V DC	
Power Consumption	IR on: 250mA, IR off: 90mA	
Operating Environment	-10°C ~ +50°C, RH95% Max	
Dimension (L x W x H)	Ø60 x 57(H) mm	
Weight	NW: 200g. GW: 250g.	

\* Specifications are subjected to change without prior notice.

# IR DOME CAMERA



IR DOME CAMERA

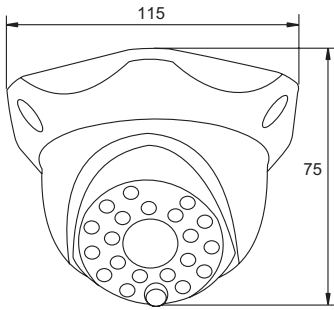
## KEY FEATURES

- Equipped with 1/3" High Sensitivity SONY CCD
- Using oval beam LEDs delivering clean vivid picture at night time
- 20 Pieces IR LEDs
- Automatic Gain Control
- Low Power Consumption

## TECHNICAL SPECIFICATIONS

Model	CF-P115SH	CF-P116SH
Image Device	1/3" Sony Super HAD CCD sensor	
Video Output	Composite 1.0 Vp-p at 75 ohm	
Scanning Frequency	NTSC: 15,734KHz(H), 60Hz(V) ; PAL: 15,625KHz(H), 50Hz(V)	
Scanning System	NTSC: 525 line 2:1 interlace PAL: 625 lines 2:1 interlace	
Effective Pixels	NTSC: 512(H) x 492(V) PAL: 512(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)
Electronic Shutter	N: 1/60- 1/100,000sec (Auto) ; P: 1/50-1/100,000sec (Auto)	
Horizontal	450 TV lines	550 TVL
White-balance	Auto white balance (2500°K ~ 9500°k)	
Synchronizing System	Internal	
Sensitivity	0.1 Lux, 0 Lux at IR on / F2.0	
BLC	Auto	
Signal to Noise	More than 48dB (AGC off)	
IR Distance	15 Meters (Based on: object of view reflected IR light)	
IR LED	High Light LED x 20 pcs	
IR View Angle	View angle: 70°, Beam spread: 40° per LED	
IR Wavelength	850nm ± 25nm	
LED Life	More than 10,000 hours	
Lens	4 mm Standard	
Power Consumption	IR on: 180mA, IR off: 120mA (DC 12V) ± 5mA	
Power Supply	DC 12V	
Temperature	Operating: -10°C to 50°C	
Storage Temperature	-20°C to +60°C	
Construction	ABS	

## MECHANICAL DIMENSION



• Specifications are subjected to change without prior notice.

# DOME CAMERA

DOME CAMERA



CF-324IR/CF-355IR

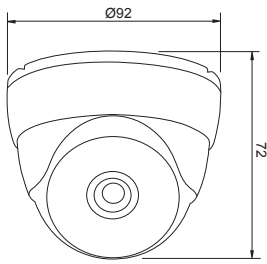


DC-D6600V3

## KEY FEATURES

- 1/3" SONY Super HAD CCD Sensor
- SONY DSP, 0Lux (IR ON)
- 32 pieces IR LED (20M)
- 3.6mm Fixed Lens
- BNC Output & DC12V Input

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	CF-324IR	CF-355IR
Pick Up Device	1/3" SONY Super HAD CCD	
Effective Pixels (H x V)	NTSC:512x492 PAL:512x582	NTSC:768x492 PAL:752x582
Sensing Area	4.9 mm x 3.7 mm	
Horizontal Resolution	450TVL	550TVL
Min Illumination	0 Lux with IR LED	
S/N Ratio	more than 48dB	
Scanning Frequency	NTSC: 15.734 KHz (H), 60 Hz(V) PAL: 15.625 KHz (H), 50 Hz (V)	
Scanning System	NTSC: 525 Line 2:1 Interlace PAL: 625 Line 2:1 Interlace	
Sync System	Internal	
Electronic Shutter	AES:1/50-1/100,000SEC	
Gamma characteristics	0.45	
Lens	3.6mm board lens	
LED	32 pcs LED	
Video output	1.0Vp-p/75 Ohm	
Power supply	DC12V / 500 mA	
Operating Temperature	-10°C ~ +50°C	
Dimension	92(Ø) x 72 (W)	
Weight	300 g	

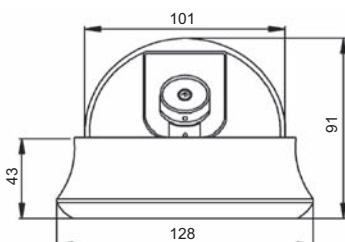
\* Specifications are subjected to change without prior notice.

# 3 AXIS STARLIGHT PLASTIC DOME CAMERA

## KEY FEATURES

- 1/3" Sony Super HAD CCD
- Built-in Samsung Winner V DSP Engine
- High Resolution: 600TVL (Color), 700TVL(B/W)
- Minimum Illumination: 0.0006Lux @ F1.2
- 4-9mm Vari-focal lens, IR optional
- SSNR II, Upgraded 3D Noise Reduction Technology
- Privacy Masking with 8 Programmable Zones
- Intelligent Motion Detection : 8 Zones
- DIS (Digital Image Stabilization)
- HLC (Highlight Compensation)
- Multi-language OSD Menu
- With OSD control cable
- With 3 Axis Adjustable Gimble

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	DC-D6600V3
Pick-up Device	1/3" Sony Super HAD CCD / Samsung Techwin W-IV DSP
Effective Pixels (H x V)	NTSC: 768 x 494 PAL: 752 x 582
Sensing Area	4.9 x 3.7mm
Horizontal Resolution	600 TV Lines
Minimum Illumination	Color: 0.15 Lux / F1.2; 0.0006 Lux (Sense up)
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronization System	Internal
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Gamma Characteristic	0.45
Auto Gain Control	HIGH / LOW / OFF BRIGHTNESS 1 ~ 100
White Balance	INDOOR / OUTDOOR / AWC / MANUAL
DNR	OFF / ON
Language	English, Chinese, German, Italian, French, Spanish
Video Output	1.0 Vp-p Composite Video, 75Ω
Lens	4-9mm vari-focal lens, 2.8-11mm lens optional
Power Supply	12V DC
Power Consumption	120mA (IR Off) / 350mA (IR On)
Operating Environment	-10°C ~ +50°C, RH95% Max
Dimension(L x W x H)	Ø127 x 114mm
Weight	240g

\* Specifications are subjected to change without prior notice.

# IR DOME CAMERA



DC-DL450IR/DC-DL600IR



DC-DL450VIR/DC-DL550VIR/DC-DL600VIR

IR DOME CAMERA

## KEY FEATURES

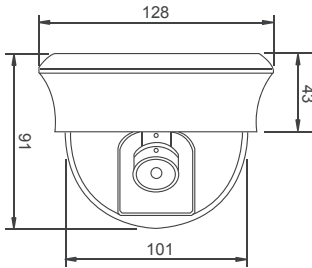
- 1/3" Sony Super HAD CCD
- 450 TVL: DC-DL450IR, 600TVL: DC-DL600IR
- 21pcs Ø5 IR LEDs
- 3 Axis Gimble
- IR Distance 20m
- Under 10 Lux Auto Switched IR LEDs by CDS
- Electronic Day / Night for DC-DL450IR
- Electronic Day / Night, Digital WDR for DC-DL600IR
- Cable control OSD Menu (option)

## TECHNICAL SPECIFICATIONS

Model	DC-DL450IR	DC-DL600IR
Pick-up Device	1/3" Sony Super HAD CCD	
Effective Pixels (H x V)	NTSC: 510 x 492 PAL: 500 x 582	NTSC: 768 x 494 PAL: 752 x 582
Sensing Area	4.9 x 3.7mm	
Horizontal Resolution	450 TV Lines	600 TVL
Minimum Illumination	0.5 Lux, 0 Lux at IR on	0.01 Lux, 0 Lux at IR on
Board Lens	3.6mm, 4.3mm, 6mm, Lens	
S/N Ratio	More than 48dB	
Scanning System	2:1 Interlace	
Synchronization System	Internal	
Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s	
IR Distance	20m	
IR Leds	21 Pcs 850nm Infrared LED	
IR status	IR on: under 10Lux, by CDS Auto Control	
Gama Characteristic	0.45	
Auto Gain Control	Auto	
White Balance	Auto	
Video Output	1.0 Vp-p Composite Video, 75Ω	

• Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



# 3 AXIS IR DOME CAMERA

## KEY FEATURES

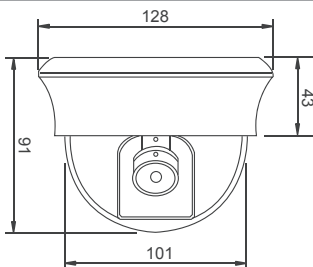
- 1/3" Sony Super HAD CCD
- 450 TVL: DC-DL450VIR, 550TVL: DC-DL550VIR, 600TVL: DC-DL600VIR
- 21pcs Ø5 IR LEDs
- 3 Axis Gimble
- IR Distance 20m
- Under 10 Lux Auto Switched IR LEDs by CDS
- Electronic Day /Night for DC-DL450VIR, DC-DL550VIR
- Electronic Day /Night , Digital WDR for DC-DL600VIR
- Cable control OSD Menu (option)
- 4~9 mm varifocal lens

## TECHNICAL SPECIFICATIONS

Model	DC-DL450VIR	DC-DL550VIR	DC-DL600VIR
Pick-up Device	1/3" Sony Super HAD CCD		
Effective Pixels (H x V)	NTSC: 510 x 492 PAL: 500 x 582	NTSC: 768 x 494 PAL: 752 x 582	NTSC: 768 x 494 PAL: 752 x 582
Sensing Area	4.9x3.7mm		
Horizontal Resolution	450 TV Lines	550TVL	600 TVL
Minimum Illumination	0.5 Lux, 0 Lux at IR on	0.5 Lux, 0 Lux at IR on	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 48dB		
Scanning System	2:1 Interlace		
Synchronous System	Internal		
Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s		
Lens	Varifocal 4~9mm Lens		
IR Distance	20m		
IR Leds	21 Pcs 850nm Infrared LED		
IR status	IR on: under 10Lux, by CDS Auto Control		
Gama Characteristic	0.45		
Auto Gain Control	Auto		
White Balance	Auto		
Video Output	1.0 Vp-p Composite Video, 75Ω		

• Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



# 700 TVL IR DOME (30M)

IR DOME CAMERA



CF-IRDV771E4/CF-IRDV771E-28

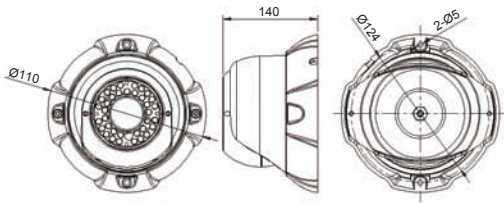


CF-IRD6003C

## KEY FEATURES

- 1/3" Sony Effio-E CCD
- 700 TVL
- 36 pcs IR Leds (30M)
- 4 ~ 9mm or 2.8 ~ 10mm varifocal lens
- Average Life: 20,000 hours
- IP66, ICR
- OSD, ATR WDR, ETC

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	CF-IRDV771E4	CF-IRDV771E-28
Pick-up Device	1/3" Sony Effio-E CCD	
Effective Pixels (H x V)	NTSC: 811 x 508, PAL: 976(H) x 582(V)	
Horizontal Resolution	700 TV Lines	
Minimum Illumination	0 Lux at IR on	
S/N Ratio	More than 52dB	
Scanning System	2:1 Interlace	
Synchronizing System	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s	
Gamma Correction	0.45	
IR Distance	30M	
IR Leds	36pcs IR Leds	
IR status	IR on: under 10Lux, By CDS auto control	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens	4-9mm Varifocal Lens	2.8-10mm Varifocal lens
Power Supply	12V DC	
Power Consumption	IR on: 330mA, IR off: 90mA	
Operating Environment	-20°C ~ +60°C, RH95% Max	
Dimension (L x W x H)	Ø110 mm x 140 (H) mm	
Weight	600g	

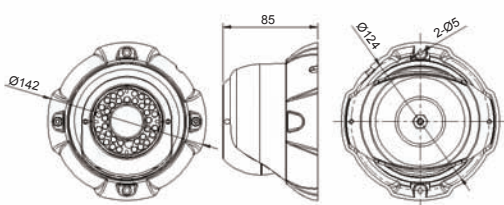
\* Specifications are subjected to change without prior notice.

# 600TVL IR DOME

## KEY FEATURES

- 1/3" Sony Super Had CCD
- 600 TVL
- 36 IR F5 Leds. Illuminate up to 30M
- Under 10lux Auto Switcher IR LED by CDS
- Privacy Masking with 4 Programmable Zones
- 4-9mm Manual Iris Lens
- With IR CUT
- Zoom & Focus External Adjustable

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	CF-IRD6003C	
Pick-up Device	1/3" Sony Super HAD CCD	
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582	
Sensing Area	4.9 x 3.7mm	
Horizontal Resolution	600 TV Lines	
Minimum Illumination	0.01 Lux, 0 Lux at IR on	
S/N Ratio	More than 52dB	
Scanning System	2:1 Interlace	
Synchronizing System	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s	
Gamma Correction	0.45	
IR Distance	30M	
IR Leds	36 Pcs 850nm infrared LED	
IR status	IR on: under 10Lux, By CDS auto control	
Video Output	1.0 Vp-p Composite Video, 75Ω	
White Balance	ATW/AWC-SET/MANUAL	
Lens	4-9mm Manual iris lens	2.8-10mm
Power Supply	12V DC	
Power Consumption	IR on: 370mA, IR off: 130mA	
Operating Environment	-20°C ~ +60°C, RH95% Max	
Dimension (L x W x H)	Ø142 mm x 82 (H) mm	
Weight	750g	

\* Specifications are subjected to change without prior notice.

# VANDAL PROOF DOME CAMERA (20M)



DC-CDV6204AV / DC-CDV6134AV



DOME CAMERA

## KEY FEATURES

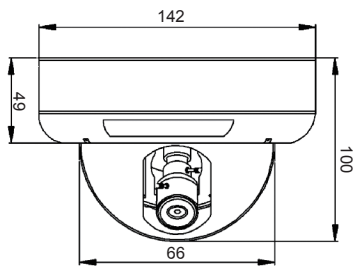
- 1/3" Sony ICX673AK CCD
- 680 TVL
- 23 IR F5 IR Leds. 20M
- 3-Axis Gimble
- Privacy Masking with 4 Programmable Zone
- With OSD Menu
- With ICR (Option)

## TECHNICAL SPECIFICATIONS

Model	DC-CDV6204AV
Pick-up Device	1/3" Sony ICX673AK CCD
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582
Sensing Area	4.9 x 3.7 mm
Horizontal Resolution	680 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronizing System	Internal
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Gamma Correction	0.45
IR Distance	20M
IR Leds	23 Pcs 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / PUSH / USER / ANTI CR / MANUAL / PUSH LOCK
Lens	4-9mm varifocal Lens (2.8-10mm Option)
Power Supply	12V DC
Power Consumption	IR on: 290mA, IR off: 130mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	F142 x 100mm
Weight	700g
Package	24pcs / Carton, 59.5 x 45.5 x 21.7cm

\* Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



# VANDAL PROOF DOME CAMERA (20M)

## KEY FEATURES

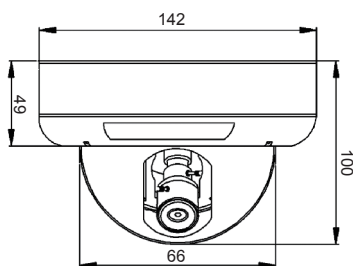
- 1/3" Sony CCD
- 600 TVL
- 23 IR F5 IR Leds. 20M
- 3 Axis Gimble
- Privacy Masking with 4 Programmable Zone
- With OSD Menu
- With ICR (Option)

## TECHNICAL SPECIFICATIONS

Model	DC-CDV6134AV
Pick-up Device	1/3" Sony CCD
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582
Sensing Area	4.9 x 3.7 mm
Horizontal Resolution	600 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 50dB
Scanning System	2:1 Interlace
Synchronizing System	Internal
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Gamma Correction	0.45
IR Distance	20M
IR Leds	23 Pcs 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / AWC-SET / MANUAL
Lens	4-9mm Varifocal Lens (2.8-10mm Option)
Power Supply	12V DC
Power Consumption	IR on: 290mA, IR off: 130mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	F142 x 100mm
Weight	700g
Package	24pcs / Carton, 59.5 x 45.5 x 21.7cm

\* Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



# 3.5" VANDAL IR DOME CAMERA WITH VARIFOCAL LENS

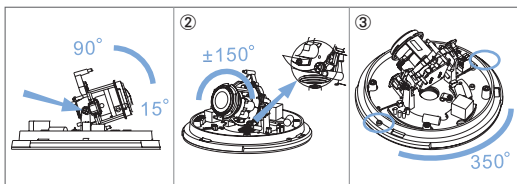
DOME CAMERA



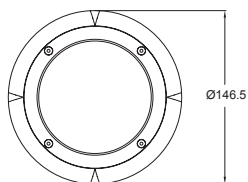
## KEY FEATURES

- IP66 Rated Housing
- 3 Dimensional Design
- Compact & Vandal Resistant Construction
- Suitable for indoor and outdoor use with a external bracket
- DSP controls for BLC, white balance and gain control
- Day & Night switchable with ICR mechanism
- Digital Noise Reduction
- Integrated of Varifocal DC Iris 2.8-11 mm Lens, 9~22 mm Lens (option)
- Fitted with LED for a better illumination at night
- With built in heater
- UTP (option)
- VD-B03R (optional bracket)
- Aluminum Housing

## 3-AXIS DESIGN



## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	VD-3VIR280
Image Sensor	1/3" Sony CCD
Effective Pixels	PAL: 752(H) x 582(V) NTSC: 771(H) x 492(V)
Resolution	600TV Lines
Scanning System	2:1 Interlace V: 50Hz 15.525KHz 2:1 Interlace V: 50Hz 15.750KHz
Synchronization	Internal
Video Output	1Vp-p, 75 ohms unbalanced
Minimum Illumination	0.05 Lux F1.4
OSD Language	English/Chinese/Japanese
Electronic Shutter	OSD Control: 1/50(60) ~ 1/100,000 sec.
White Balance	OSD Control: Tracking 2500°K ~ 9500°K
BLC	OSD Control, Center Area
DWDR	OSD Control
DNR	OSD Control (0 ~ 32 Level Adjustable)
Gamma Correction	0.45
Gain Control	OSD Control
Motion Detection	OSD Control (4 zone)
FLIP (V-REV)	OSD Control
Freeze	OSD Control
Sharpness	OSD Control (LEVEL Adjustable)
Digital Zoom	OSD Control (x1 ~ 10)
Blemish Compensation	256 Point (Even 128 Point, ODD 128 Point)
UTP Gain	UTP Gain Adjustable (option)
D & N Selection	COLOR / BW / AUTO / EXT
IR LED Unit	28 pieces
IR Effective Range	25M ~ 30M
Built in Lens	2.8 ~ 11 mm DC Iris varifocal Lens 9 ~ 22 mm lens (option)
S/N Ratio	More than 50dB (AGC off)
Operating Temperature	-10°C +45°C
Storage Temperature	-30°C +60°C
Power Supply	AC24V/ DC12V(Dual Power)
Power Consumption	IR OFF: 300mA under DC12V IR ON: 1A under DC12V
Dimension (L x W) mm	170.45Ø x 79(H) mm
Weight	750g

\* Specifications are subjected to change without prior notice.

## ACCESSORIES



**VD-B03R**  
Wall Mount Bracket



**VD-B04L-J**  
Junction Box



**SIDE VIEW**



**FRONT VIEW**



# 3.5" VANDAL DOME CAMERA WITH VARIFOCAL LENS



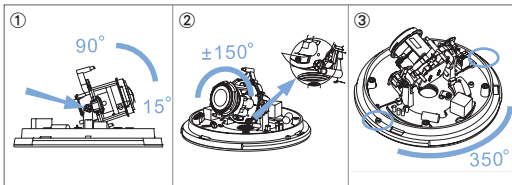
## KEY FEATURES

- Compact & Vandal Resistant Construction
- Suitable for indoor and outdoor use with a external bracket
- DSP controls for BLC, white balance and gain control
- 3 Dimensional Design
- IP66 Rated Housing
- Unique Burglar Proof screw
- Digital Noise Reduction
- Integrated of Varifocal DC Iris 3.5 ~ 9.5 mm Lens, or 2.8 ~ 11mm
- Lens, 9 ~ 22 mm Lens (option)
- UTP (option)
- VD-B03R (optional bracket)
- Aluminum Housing

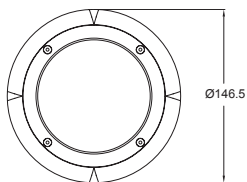
## TECHNICAL SPECIFICATIONS

Model	VD-3V280
Image Sensor	1/3" SONY CCD
Effective Pixels	PAL: 752(H) x 582(V) NTSC: 771(H) x 492(V)
Resolution	600TV Lines
Scanning System	2:1 Interlace V: 50Hz 15.525KHz 2:1 Interlace V: 60Hz 15.750KHz
Synchronization	DC: Internal AC: Line-lock (option)
Video Output	1Vp-p, 75 ohms unbalanced
Minimum Illumination	0.05 Lux F1.4
Electronic Shutter	Auto: 1/50(60) ~ 1/100,000 sec.
White Balance	Auto Tracing 2500°K ~ 9500°K
BLC	Auto, Center area
Flickerless	ON/OFF
Gamma Correction	0.45
Gain Control	Auto
Built in Lens	3.5 ~ 9.5mm DC Iris Varifocal lens 2.8 ~ 11 mm , 9 ~ 22 mm DC Iris Varifocal lens (option)
S / N Ratio	More than 50dB (AGC off)
Operating Temperature	-10°C+45°C
Storage Temperature	-30°C+60°C
Power Supply	AC24V/ DC12V±20%
Power Consumption	300mA under DC12V
Dimension (mm)	170.45Ø x 79(H) mm
Weight	750 g

## 3-AXIS DESIGN



## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

## ACCESSORIES



**VD-B03R**  
Wall Mount Bracket



**VD-B04LJ**  
Junction Box



**SIDE VIEW**



**FRONT VIEW**

# ANTI-GRIP DOME CAMERA

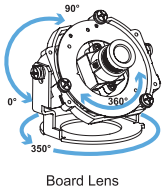
DOME CAMERA



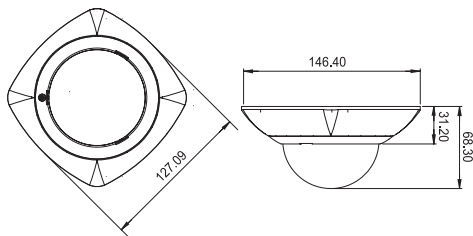
## KEY FEATURES

- Ultra Compact and Light Weight
- Anti-Grip with Tri-Axis Gimble design
- With 1/3" CCDs: Sony
- Stable Picture Quality
- ABS Housing
- Aperture Correction

## 3-AXIS DESIGN



## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	DC-525A-W25
Image Sensor	1/3" Sony CCD
Resolution	600 TV Lines
Effective Pixels	PAL: 752(H)×582(V) NTSC: 768(H)×494(V)
Total Pixels	PAL: 795(H)×596(V) NTSC: 811(H)×504(V)
Scanning System	2:1 Interlace
Video Output	1Vp-p output , 75 ohm composite
Synchronization	Internal
S/N Ratio	More than 48 dB
OSD Language	OSD Control
Gamma Correction	0.45
Shutter Control	NTSC: 1/60 sec. ~ 1/100,000 sec. PAL: 1/50 sec. ~ 1/100,000 sec.
Minimum Illumination	0.5 Lux F1.8
Lens Mount	2.5mm Wide Angle Lens
Audio	Support
White Balance	OSD Control
Gain Control	OSD Control
DNR	OSD Control
Motion Detection	OSD Control
Privacy	OSD Control
Mirror (H-REV)	OSD Control
Blemish Compensation	OSD Control
D&N Selection	OSD Control
D-WDR	OSD Control
Black Light	OSD Control
Backlight Compensation	Full Auto
Auto Gain Control	Full Auto
Power Supply	DC12V
Power Consumption	60 mA±10%
Storage Temperature	-30°C +60°C
Operating Temperature	-10°C +45°C
Dimension L×W×H mm	127.09 mm x 99.5(H) mm
Weight	240 g

\* Specifications are subjected to change without prior notice.

# IR BULLET CAMERA



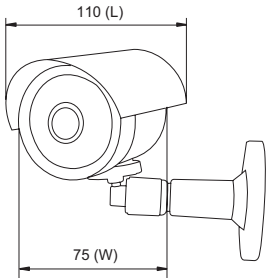
BULLET CAMERA

## KEY FEATURES

- IR distance: 30 meters
- Horizontal resolution 450 TV Lines, 550 TV Lines
- Built in fixed lens 4 mm, 6 mm Lens
- Attractive white housing/stainless steel joint for long durability
- IP66 Rated for outdoor use

## TECHNICAL SPECIFICATIONS

## MECHANICAL DIMENSION



Model	ICX-IR108SH	ICX-IR120SH
Image Device	1/3" Sony CCD sensor	
Video Output	Composite 1.0 Vp-p at 75 ohm	
Scanning System	NTSC: 525 Line 2:1 interlace, 15,734KHz(H), 60Hz(V) PAL: 625 Lines 2:1 interlace 15,625KHz(H), 50Hz(V)	
Effective Pixels	NTSC: 512(H) x 492(V) PAL: 512(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)
Electronic Shutter	NTSC: 1/60-1/100,000 sec (Auto); PAL: 1/50-1/100,000sec (Auto)	
Horizontal	450 TV Lines	550 TV Lines
White-balance	Auto white balance (2500°K-9500°K)	
Synchronizing System	Internal	
Sensitivity	0.1 Lux, 0 Lux at IR on / F2.0	
BLC	Auto	
Signal to Noise	More than 48dB AGC off	
AGC	Yes	
Gamma Correction	0.45	
IR Distance	30Meters (Max.)	
IR LED	40 pcs LED	
IR Status	Under 10 Lux by CDS auto control	
IR View Angle	View angle: 70°, Beam spread: 40°/per LED	
IR Wavelength	850nm ± 25nm	
LED Life	More than 10,000 hours	
Lens	4 mm Standard (6mm Option)	
Power Consumption	IR On: 280 mA, IR Off: 70 mA	
Operating Temperature	-10 to 50°C	
Storage Temperature	-20°C to +60°C	
Video Output	Composite 1.0 Vp-p at 75 ohm	
Construction	Aluminum	
Dimension	75Ø x 110(L) mm	
Weight	400 g	

\* Specifications are subjected to change without prior notice.

# IR BULLET CAMERA

BULLET CAMERA



## KEY FEATURES

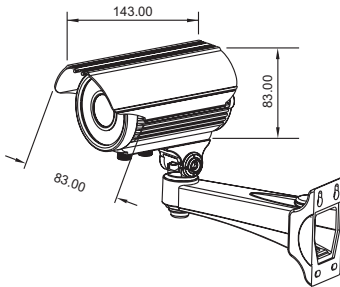
- 1/3" Sony Effio-E
- 650 TVL
- 42 IR Leds.Illuminate up to 40M, or 72 IR Leds. Illuminate up to 60M
- 4-9mm Varifocal Lens (9-22mm Optional)
- With OSD, ATR WDR
- Average Life: 20,000 hours
- IP65

## TECHNICAL SPECIFICATIONS

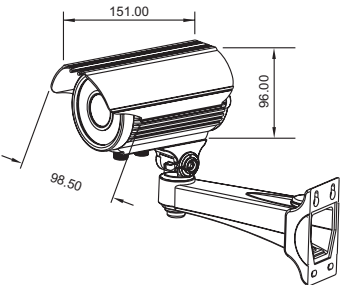
Model	AT-IRV265E/42	AT-IRV265E/72
Pick-up Device	1/3" Sony Effio-E	
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582	
Sensing Area	4.9 x 3.7mm	
Horizontal Resolution	650 TV Lines	
Minimum Illumination	0.5 Lux, 0 Lux at IR on	
S/N Ratio	More than 48dB	
Scanning System	2:1 Interlace	
Synchronous System	Internal	
Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s	
Gama Characteristic	0.45	
IR Distance	40M	
IR Leds	42 Pcs 850nm infrared LED	72 Pcs 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens	4-9mm Varifocal Lens (9-22mm lens Optional)	
Power Supply	12V DC	
Power Consumption	IR on: 330mA, IR off: 90mA	
Operating Environment	-10°C ~ +50°C, RH95% Max	
Dimension (L x W x H)	140 x Ø70 x 70mm	
Weight	850g	
Package	20pcs/Carton, 59 x 49 x 39 cm	

## MECHANICAL DIMENSION

AT-IRV265E/42



AT-IRV265E/72



\* Specifications are subjected to change without prior notice.

# IR BULLET CAMERA (20M)



ICX-IRF6020C28

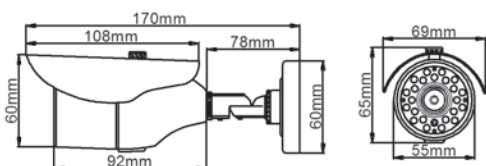
ICX-B3600V4

BULLET CAMERA

## KEY FEATURES

- 1/3" Sony Super HAD CCD
- 600 TVL
- 23 IR F5 Leds. Illuminate u to 20M
- IP66
- Electronic Day & Night
- Cable Control OSD Menu

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	ICX-IRF6020C28
Pick-up Device	1/3" Sony Super HAD CCD
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582
Sensing Area	4.9 x 3.7mm
Horizontal Resolution	600 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronous System	Internal
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Gama Characteristic	0.45
IR Distance	20M
IR Leds	23 Pcs 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / AWC-SET / MANUAL
Lens	3.6mm Board Lens
Power Supply	12V DC
Power Consumption	IR on: 280mA, IR off: 90mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	170 x 69 x 65 mm
Weight	400g
Package	25pcs / Carton, 51.5 x 39 x 37cm

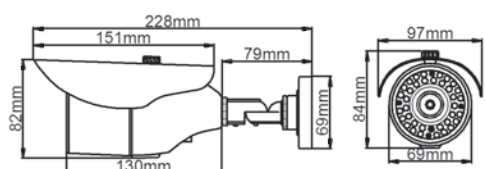
• Specifications are subjected to change without prior notice.

# IR BULLET CAMERA (30M)

## KEY FEATURES

- 1/3" Sony Super HAD CCD
- 600 TVL
- 36 IR F5 Leds. 30M
- IP66 with Weather proof Shield
- Electronic Day/Night
- 2.8-10mm Auto iris lens (4-9mm)
- With IR CUT (Option)
- Cable control OSD Menu
- 3-Axis Cable Management Cable Base

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	ICX-B3600V4
Pick-up Device	1/3" Sony Super HAD CCD
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582
Sensing Area	4.9 x 3.7mm
Horizontal Resolution	600 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronous System	Internal
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Gama Characteristic	0.45
IR Distance	30M
IR Leds	36 Pcs 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / AWC-SET / MANUAL
Lens	2.8-10mm Auto iris Lens (4-9mm Varifocal Lens)
Power Supply	12V DC
Power Consumption	IR on: 360mA, IR off: 90mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	228 x 97 x 84mm
Weight	530g

• Specifications are subjected to change without prior notice.

# IR BULLET CAMERA (40M)

BULLET CAMERA



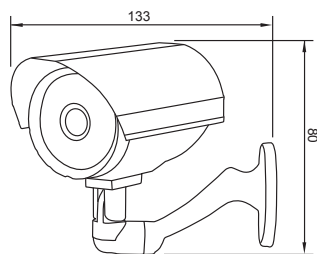
## KEY FEATURES

- 1/3" Sony Effio-E CCD
- 700 TVL
- 48IR Leds. Illuminate u to 40M
- 3.6 MM Fixed Lens
- Average Life: 20,000 hours
- IP66, ICR (Option)
- OSD, ATR WDR, ETC

## TECHNICAL SPECIFICATIONS

Model	ICX-IRF971E	ICX-IRF971E-ICR
Pick-up Device	1/3" Sony Effio-E CCD	
Effective Pixels (H x V)	NTSC: 811 x 508 , PAL: 976(H) x 582(V)	
Horizontal Resolution	700 TV Lines	
Minimum Illumination	0.5 Lux, 0 Lux at IR on	
S/N Ratio	More than 52dB	
Scanning System	2:1 Interlace	
Synchronous System	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s , PAL: 1/50s ~ 1/100,000s	
Gama Characteristic	0.45	
IR Distance	40M	
IR Leds	48Pcs 840nm infrared LED	
IR status	IR on: under 10Lux, By CDS auto control	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens	3.6mm Fixed Lens	
Power Supply	12V DC	
Power Consumption	IR on: 330mA, IR off: 90mA	
Operating Environment	-20°C ~ +60°C, RH95% Max	
Dimension (L x W x H)	133mm x 80mm	
Weight	550 g	

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# IR BULLET CAMERA (40M)



BULLET CAMERA

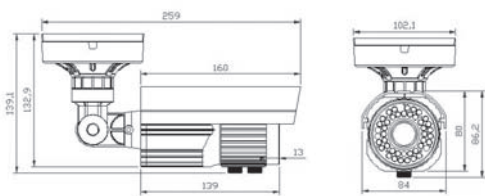
## KEY FEATURES

- 1/3" Sony ICX673AK CCD
- 700 TVL
- 42 IR F5 IR Leds. 40M
- IP66 ,3-Axis Cable Management Bracket
- Privacy Masking with 4 Programmable Zones
- 2.8-10mm Auto iris lens (4-9mm)
- With IR CUT
- Multi-language OSD Menu
- 3-Axis Cable Management Cable Base

## TECHNICAL SPECIFICATIONS

Model	ICX-IRV700C/28
Pick-up Device	1/3" Sony ICX673AK CCD
Effective Pixels (H x V)	NTSC: 768 x 494 , PAL: 752 x 582
Sensing Area	4.9 x 3.7mm
Horizontal Resolution	700 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronous System	Internal
Electronic Shutter	NTSC: 1/60s~1/100,000s , PAL: 1/50s~1/100,000s
Gama Characteristic	0.45
IR Distance	40M
IR Leds	42 Pcs F5 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / PUSH / USER / ANTI CR / MANUAL / PUSH LOCK
Lens	2.8-10MM Auto iris Lens (4-9mm Varifocal lens)
Power Supply	12V DC
Power Consumption	IR on: 470mA, IR off: 130mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	259 x 139 x 102mm
Weight	1300 g
Package	10pcs / Carton, 91 x 35 x 33cm

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# EXTERNAL ADJUSTABLE IR BULLET CAMERA (40M)

BULLET CAMERA



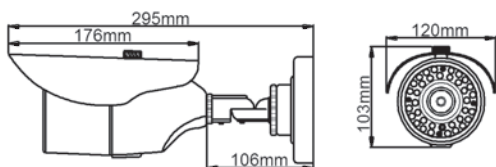
## KEY FEATURES

- 1/3" Sony Super HAD CCD
- 600 TVL
- 35 IR F8 IR Leds. 50M
- IP66 with Weather proof Shield
- Electronic Day/Night
- 2.8-10mm Auto iris lens (4-9mm)
- With IR CUT
- Cable control OSD Menu
- 3-Axis Cable Management Cable Base

## TECHNICAL SPECIFICATIONS

Model	ICX-IRV7020C28
Pick-up Device	1/3" Sony Super HAD CCD
Effective Pixels (H x V)	NTSC: 768 x 494, PAL: 752 x 582
Sensing Area	4.9 x 3.7mm
Horizontal Resolution	600 TV Lines
Minimum Illumination	0.01 Lux, 0 Lux at IR on
S/N Ratio	More than 52dB
Scanning System	2:1 Interlace
Synchronous System	Internal
Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
Gama Characteristic	0.45
IR Distance	50M
IR Leds	35 Pcs F8 850nm infrared LED
IR status	IR on: under 10Lux, By CDS auto control
Video Output	1.0 Vp-p Composite Video, 75Ω
White Balance	ATW / AWC-SET / MANUAL
Lens	2.8-10MM Auto iris Lens (4-9mm Varifocal lens)
Power Supply	12V DC
Power Consumption	IR on: 580mA, IR off: 90mA
Operating Environment	-20°C ~ +60°C, RH95% Max
Dimension (L x W x H)	295 x 120 x 103mm
Weight	900g

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.



# IR BULLET CAMERA



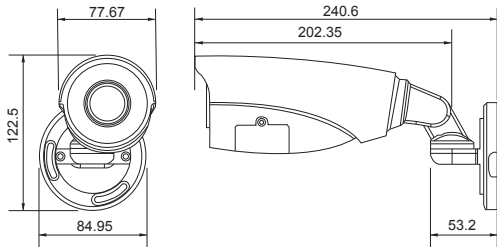
## KEY FEATURES

- 1/3" CCD Image Sensor
- 600 Lines of Resolution
- Flexible lens : Board lens: 3.6mm/4.3mm/6mm
- Up to 30M IR range
- Aspherical IR lenses with IR cut filter
- Dual Voltage Power
- 500lb of force resistant bracket
- Cable Management Mount
- With Heater
- IP66 Rated Housing

## TECHNICAL SPECIFICATIONS

Model	AV-B621	AV-B655	AV-B681
Image Device	1/3" SONY CCD	1/3" Sharp CCD	1/3" SONY CCD
Effective Pixels	NTSC: 512(V) x 492(V) PAL: 500(V) x 582(V)	NTSC: 768(H) x 494 (V) PAL: 752(H) x 582(V)	NTSC: 768(H) x 494 (V) PAL: 752(H) x 582(V)
Scanning System	2:1 Interlace		
Horizontal Resolution	450TV Lines	500 TV Lines	600 TV Lines
Video Output	1Vp-p Video composite, 75 ohm		
Sensitivity	0.1 ~ 0.5 Lux		
Synchronization	Internal		
S/N Ratio	More than 48 dB		
Gamma Correction	0.45		
Electronic Shutter	Auto & up to 1/100,000 sec		
Lens	3.6 / 4.3 / 6.0 mm Lens 3.6mm: (D)89°(H)68°(V)49.56° 4.3mm: (D)78°(H)62°(V)46.5° 6.0mm: (D)46°(H)36.69°(V)27.51°		
IR LEDs	24 pieces		
IR Wavelength	850nm		
IR Range	Lens 3.6/4.3mm: IR Range 30M Lens 6mm: IR Range 50M		
IP Rated Housing	IP 66		
Auto White Balance	Full Auto		
Auto Gain Control	Full Auto		
Backlight Compensation	Full Auto		
Aperture Correction	2H mode of H.V. aperture correction		
Power Supply	DC12V or AC24V/DC12V (option)		
Heater Power	Heater will be truned on at 15°C or under		
Storage Temperature	-30°C~+60°C		
Operating Temperature	-10°C~+55°C		
Dimension	230(L)mm x 77.5(W) mm x 76.3(H) mm		
Net Weight	950g		

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# OUTDOOR IR CAMERA

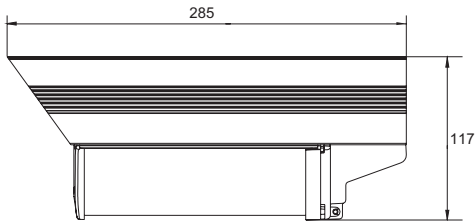
BULLET CAMERA



## KEY FEATURES

- Horizontal resolution 450 TV Lines, 550 TV Lines
- Auto Gain Control
- IR distance: 60 Meters
- LED: 77 unit 840nm infrared LED
- Power on: CDS auto control

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	ICX-3450V4	ICX-3550V4
Image Device	1/3" Sony CCD sensor	
Scanning Frequency	NTSC: 15,734KHz(H), 60Hz(V); PAL: 15,625KHz(H), 50Hz(V)	
Scanning System	NTSC: 525 line 2:1 interlace PAL: 625 lines 2:1 interlace	
Effective Pixels	NTSC: 512(H) x 492(V) PAL: 512(H) x 582(V)	NTSC: 768(H) x 492(V) PAL: 752(H) x 582(V)
Electronic Shutter	N: 1/60- 1/100,000 sec (Auto); PAL: 1/50-1/100,000sec (Auto)	
Horizontal	450 TV Lines	550 TV Lines
White-balance	Auto white balance (2500°K-9500°K)	
Synchronizing System	Internal	
Sensitivity	0.1 Lux, 0 Lux at IR on / F2.0	
BLC	Auto	
Signal to Noise	More than 48dB AGC off	
AGC	Yes	
Gamma Correction	0.45	
IR Distance	60 Meters (Max.)	
IR LED	77 pcs LED	
IR Status	Under 10 Lux by CDS auto control	
IR View Angle	View angle: 70°, Beam spread: 40°/per LED	
IR Wavelength	840nm ± 25nm	
LED Life	More than 10,000 hours	
Lens	4-9MM VARIFOCAL LENS	
Power Consumption	IR on: 1A, IR off: 70mA ± 5mA	
Power Supply	12VDC OR 110V ~ 240V	
Temperature	Operating: -10 to 50°C	
Video Output	Composite 1.0 Vp-p at 75 ohm	
Construction	Aluminum	
Dimensions	285 (L) x 121 (W) x 117(H) mm	
N.W	900G	

• Specifications are subjected to change without prior notice.

# TAMPER PROOF IR NIGHT VISION BULLET CAMERA



BULLET CAMERA

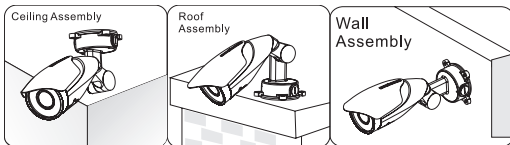
## KEY FEATURES

- Choice of 600 TV lines camera
- Horizontal resolutions 600 TV lines camera
- Maximum IR effective distance can up to 120 Meters, with Hi-Power LEDs
- True Day Night Surveillance with ICR filter mechanism
- Built In aspherical varifocal DC Iris lens: 4~9mm, 2.8~11mm, 6~50mm, 9~22mm
- Easy to be installed
- Tri-Axis Bracket for Wall, Ceiling and Roof
- Concealed Cabling Management
- Low Power Consumption
- Powered with AC24V/DC12V
- IP66 Rated for Outdoor Use
- Built in heater
- Standard Color: Silver
- UTP (option)

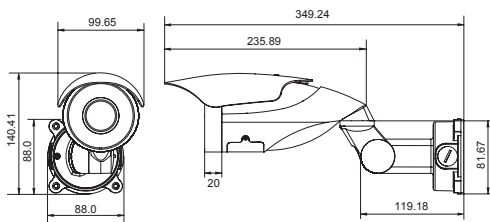
## TECHNICAL SPECIFICATIONS

Model	YV-XP8860	YV-XP8862	YV-XP8864	YV-XP9650
CCD Sensor	1/3" SONY CCD + Next Chip DSP			
Effective Pixels	NTSC: 768(V) x 494(V) PAL: 752(V) x 582(V)			
Horizontal Resolution	Color:600 TVL B/W: 700 TVL			
Synchronization System	Internal			
S/N Ratio	48 dB			
Gamma Correction	0.45			
Video Output	1Vp-p, 75 ohms unbalanced			
Lens	4~9 mm F1.2, Varifocal DC Iris Lens	2.8~11 mm F1.2, Varifocal DC Iris Lens	9~22mm F1.2, Varifocal DC Iris Lens	6~50mm F1.2, Varifocal DC Iris Lens
Minimum Illumination	Color: 0.001 Lux B/W: 0 Lux			
IR Cut	Yes, automatic switchover from color to monochrome by IR Cut Filter			
DWDR	OSD Control			
DNR	OSD Control (on/off)			
Motion Detection	OSD Control (4 zone)			
Privacy Mask	OSD Control (8 zone)			
Mirror (H-REV)	OSD Control			
Sharpness	OSD Control (Level Adjustable)			
D & N Selection	Auto Only			
Blemish Compensation	OSD Control (DPC)			
Backlight Compensation	OSD Control			
White Balance	OSD Control			
Auto Electric Shutter	OSD Control			
IR LEDs	18 pieces Hi-Power LED			
IR Range Distance	70M	50M	100M	120M
IR Wavelength	850nm			
IP Rated	IP66			
Heater Power	Heater will be turned on at 15°C			
Storage Temperature	-30°C to +60°C			
Operating Temperature	-10°C to +50°C			
Power Consumption	IR OFF: 200mA±10% IR ON: 700mA±15%			
Power Supply	AC24V/DC12V±10%			
Bracket	3 dimensional: suitable for wall, ceiling & roof mounting			
Dimension	350(L) x 100(W) x 140(H)mm			
Weight	1.7 kgs			

## 3-AXIS DESIGN



## MECHANICAL DIMENSION



• Specifications are subjected to change without prior notice.

# 600 TVL IR BULLET CAMERA

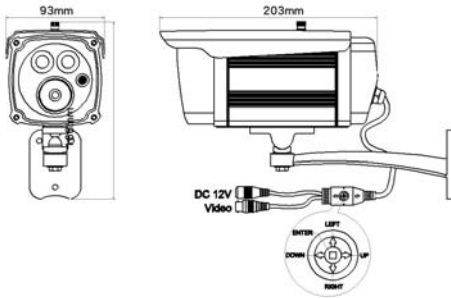
ARRAY CAMERA



## KEY FEATURES

- 1/3" Color Sony Super HAD
- Digital Wide Dynamic Range
- Preset OSD Menu
- HLC (High Light Compensation)
- 2D-DNR (Digital Noise Reduction)

## MECHANICAL DIMENSION



## TECHNICAL SPECIFICATIONS

Model	ICX-IR3677R
Image Device	1/3" Color Sony Super HAD
Effective Pixels (H x V)	NTSC:768x 494, PAL:752 x 582
Horizontal Resolution	600TV Lines
Minimum Illumination	0 Lux (IR on)
S/N Ratio	More than 52dB
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s
Flickerless Mode	On/Off (NTSC: 1/100, PAL: 1/120)
Gamma Correction	0.45
Video Output	1Vp-p / 75 ohms
Lens	Fixed IRIS Lens 6.0 mm / F1.6
Digital Noise Reduction	2D DNR
Wide Dynamic Range	DWDR (on/off)
White Balance	OSD adjustment
On Screen Display (OSD)	English / Chinese
Synchronous System	Internal
Back Light Compensation	Off (Default) / BLC / HLC
Flickerless	Yes
Day & Night	Color / BW / Auto Switch
Mirror	Yes (Default: Off)
Privacy Masking	8 Zone (Default: off)
Motion Detection	4 Zone (Default: off)
Gain Control	Auto / Manual
Infrared Luminary	2 pcs 3 rd Generation LED (850nm)
IR Range	40M
Power Supply	12V DC± 10%
Power Consumption	IR on: 600 mA max. IR Off: 80 mA max.
Operating Temperature	-10°C ~ +50°C
Storage Temperature	-30°C ~ +60°C
Dimension (L x W x H)	203(L) x 93(W) x 166(H) mm

• Specifications are subjected to change without prior notice.

# IR DOME CAMERA (30M)



DOME ARRAY CAMERA

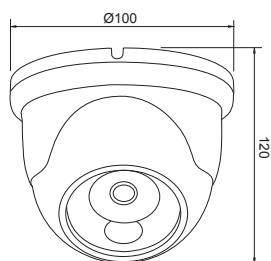
## KEY FEATURES

- 1/3" Sony Effio-E CCD
- 700 TVL
- 1pc III Array IR Leds. Illuminate u to 30M
- 3.6 / 6mm Fixed Lens
- Average Life: 20,000 hours
- IP66, ICR (Option)
- OSD, ATR WDR, ETC

## TECHNICAL SPECIFICATIONS

Model	CF-IRD871E	CF-IRD871E-ICR
Pick-up Device	1/3" Sony Effio-E CCD	
Effective Pixels (H x V)	NTSC: 811 x 508, PAL: 976(H) x 582(V)	
Horizontal Resolution	700 TV Lines	
Minimum Illumination	0 Lux at IR on	
S/N Ratio	More than 52dB	
Scanning System	2:1 Interlace	
Synchronizing System	Internal	
Electronic Shutter	NTSC: 1/60s ~ 1/100,000s, PAL: 1/50s ~ 1/100,000s	
Gamma Correction	0.45	
IR Distance	30M	
IR Leds	1pc III Array IR Led	
IR status	IR on: under 10Lux, By CDS auto control	
Video Output	1.0 Vp-p Composite Video, 75Ω	
Lens	3.6mm or 6mm Fixed Lens	
Power Supply	12V DC	
Power Consumption	IR on: 330mA, IR off: 90mA	
Operating Environment	-20°C ~ +60°C, RH95% Max	
Dimension (L x W x H)	Ø100 mm x 120 (H) mm	
Weight	500g	

## MECHANICAL DIMENSION



• Specifications are subjected to change without prior notice.

# SMOKE DETECTOR CAMERA

SMOKE DETECTOR CAMERA



## KEY FEATURES

- Patent: OSD Function operated by Remote Control (Optional)
- (Adjust the parameters of camera easily)
- 1/3" Sony Super HAD Color CCD Sensor
- Excellent Picture Performance with Hi-resolution (540TVL)
- Apply to Home Security, School, Supermarket, Restaurant, Government Building, Bank, Hotel
- Video Output Dual Port (Optional): BNC & Balun
- (Balun: extend to 600 meters)

## TECHNICAL SPECIFICATIONS

Model	SMC-420	SMC-540
Lens	4.3mm (Available for 2.9 / 4.3 / 6.0 / 8.0 / 12 / 16mm)	
Color CCD	1/3" Sony Super HAD Color CCD Sensor	
System	NTSC / PAL	
SYNC System	Internal	
Number of Pixel	NTSC: 512 ( H ) x 492 ( V ) PAL: 512 ( H ) x 582 ( V )	NTSC: 768 ( H ) x 494 ( V ) PAL: 752 ( H ) x 582 ( V )
Resolution	420 TV Lines	540 TV Lines
Minimum Illumination	0.1 Lux	
S / N Ratio	More than 48 dB	
Electronic Shutter	1/60 ( 50 ) to 1 / 100,000 sec.	
Gamma Correction	0.45	
White Balance	Auto (ATW)	
AGC	Automatic	
BLC	Automatic	
Current Consumption	80mA ± 10 %	
Working Voltage	DC 12V-18V	
Video Output	1.0 Vp-p Composite, 75Ω	
Video Output Dual Port	Optional	
Scanning Frequency	15.734 KHz (H), 59.94 Hz (V) (NTSC)	
D/A Bit	10 D/A Bit	
Operation Temperature	-10°C~ 60°C	

• Specifications are subjected to change without prior notice.

# PIR CAMERA



## KEY FEATURES

- 1/3" Sony Super HAD Color CCD Sensor
- Excellent Picture Performance with Hi-resolution (540TVL)
- Apply to Home Security, Office, School, Supermarket, Restaurant, Government Building, Bank, Hotel
- Video Output Dual Port (Optional) : BNC & Balun (Balun: extend to 600 meters)

## TECHNICAL SPECIFICATIONS

Model	PIR-420	PIR-540
Lens	4.3 mm	
Color CCD	1/3" Sony Super HAD Color CCD Sensor	
System	NTSC / PAL	
SYNC System	Internal	
Number of Pixel	NTSC: 512 ( H ) x 492 ( V ) PAL: 512 ( H ) x 582 ( V )	NTSC: 768 ( H ) x 494 ( V ) PAL: 752 ( H ) x 582 ( V )
Resolution	420 TV Lines	540TV Lines
Minimum Illumination	0.1 Lux	
S / N Ratio	More than 48 dB	
Electronic Shutter	1/60 ( 50 ) to 1 / 100,000 sec.	
Gamma Correction	0.45	
White Balance	Auto (ATW)	
AGC	Automatic	
BLC	Automatic	
Current Consumption	80mA ± 10%	
Working Voltage	DC 12V-18V	
Video Output	1.0 Vp-p Composite, 75Ω	
Video Output Dual Port	Optional	
Scanning Frequency	15.734 KHz (H), 59.94 Hz (V) (NTSC)	
Operation Temperature	-10°C ~ 60°C	

• Specifications are subjected to change without prior notice.

# MINI COLOR CAMERA



## KEY FEATURES

- High quality picture, aesthetic and easy to install
- Auto Gain Control (AGC)
- Auto exposure (AE)
- Aperture Correction
- Anti color rolling

## TECHNICAL SPECIFICATIONS

Model	MC-600	MC-600-R
Image Device	1/3" Sony CCD sensor	
Number of Pixels	NTSC: 768(H) x 494(V) PAL: 752(H) x 582(V)	
Horizontal	More than 600 TV Lines	
Scanning System	2:1 Interlace	
Sensitivity	0.5 Lux F2.2	
Synchronization	Internal	
S/N Ratio	More than 48dB	
Gamma Correction	0.45	
Electronic Shutter	Auto and up to 1/100,000	
Lens	3.7 mm Pinhole Lens (Option: 2.5mm, 3.6mm, 4.3mm, 6mm)	
Auto White Balance	ATW with MCT TECHNOLOGY (MULTI-COLOR TEMP)	
Auto Gain Control	Full Auto	
Backlight Compensation	On	
Power Supply	DC 12V (-/+10%)	
Power Consumption	85mA ±10% under DC 12V	
Storage Temperature	-30°C +60°C	
Storage Temperature	-10°C +45°C	
Dimension	32 mm (L) x 32 mm (W)	
Weight	120 g	

• Specifications are subjected to change without prior notice.

## ACCESSORIES



RS-485 CONTROL



MC-600-R

# VEHICLE CAMERA RECORDER



## TECHNICAL SPECIFICATIONS

Model	CR-M268IR	CR-M231
Image Sensor	1/4"	
Pixel	656 x 496	
LEDs	Options	
Lens Angle	Internal: 168(D), 129(H), 94(V) External: 68(D), 58(H) x 42(V)	Wide: 116(D), 92(H), 68(V) Tele: 31(D), 24(H), 18(V)
Audio recording	Internal Mic	
Voice Announcement	internal speaker 0.3W	
Storage	SD memory Card (2GB-32 GB)	
GPS	Internal GPS module	
G-sensor	Internal 3D "G" sensor	
Operating Temperature	- 20°C - +70°C	
Power Consumption	DC12V - 24V	
Dimension:	89mm x 117mm x 52mm	
Weight	122 g.	

• Specifications are subjected to change without prior notice.

## KEY FEATURES

- 2 camera in flexi-joint structure to easily adjust the camera angle when installed inside the car
- Fully equipped SD slot for continued memory of incidents
- Fully equipped GPS module to find the location of the vehicle, recorded time and speed of the car can be easily updated with the provided software and vehicle movements can be tracked from Google maps
- Impact of a vehicle is detected and recorded with built in G-shock sensor.
- User can immediately recognize the current operation status with voice announcement
- Internal Microphone built in
- Using car battery recharger to maintain full operation.

# ANTENNA

ANTENNA



## WM-24AN3W

2.4GHz Omni Directional Ceiling Antenna 3dBi



### FEATURES

- Frequency Range: 2.35 ~ 2.5 GHz
- Connector: RP-SMA male
- Swivel Range: 0°, 45°, 90°
- Size: Ø10 x 112 mm
- Weight: 10 g

## WM-24AP18

2.4GHz Hi-Gain directional antenna +18db



### FEATURES

- Waterproof plastic housing
- Suitable for external use
- Connector: N type female
- Fixing bracket supplied
- 18dB Gain
- Weight 900gm
- Dimensions: 263 x 263 x 30mm

## WM-24YG

2.4GHz Hi-gain Yagi Directional Antenna 18dBi



### FEATURES

- Frequency Range: 2.4 ~ 2.5 GHz
- Connector: N type female
- Boom length: 550 mm
- Weight: 500 g
- Water proof: IP68
- Operating Temp.: -20°C ~ +60°C
- Storage Temp.: -30°C ~ +70°C

## WM-24AG

2.4GHz Hi-gain parabolic directional antenna



### FEATURES

- Max Gain: +10 dB
- Connector: SMA Female
- Operating frequency 2300 - 2500MHz
- Impedance: 50 Ohms
- Max I/P 50 Watts
- Beam Width: 9.5° Horiz
- Dimensions (mm): 275 x 125 x 90
- Weight: 420gm
- Application external up to 1W Transmitter

## WM-24AP-H

2.4GHz Hi-gain directional Antenna 14dBi W/Water proof Box & Bracket



### FEATURES

- External use
- Gain: 14dBi
- Water proof: IP66
- Plastic housing complete with fixing bracket
- Size: 256 x 226 x 88.5 mm

## WM-24AN5W

2.4GHz Omni Directional Antenna 5dBi



### FEATURES

- Frequency Range: 2.35 ~ 2.5 GHz
- Connector: RP-SMA male
- Swivel Range: 0°, 45°, 90°
- Size: Ø13 x 196 mm
- Weight: 30 g



# ANTENNA



ANTENNA

## WM-24ANC4

2.4GHz Omni Directional Ceiling Antenna 4dBi



### FEATURES

- Connector: SMA male
- For 2.4GHz wireless cameras and receivers
- Frequency Range 2.4~2.4835 GHz
- Size: 130 x 130 x 42 mm
- Weight: 146 g

## WM-24AN9

2.4GHz Omni directional antenna 9dB gain



### FEATURES

- Connector N type male
- 9dB gain
- Size 22 x 610mm
- Weight 900g

## WM-24AN12

2.4GHz Omni directional Antenna 12dBi



### FEATURES

- Connector: N type male
- Size :24 x 1210mm
- Weight :1150g

# 2.4G 1W HIGH POWER VIDEO+AUDIO TRANSMITTER AND RECEIVER

WIRELESS TRANSMITTER & RECEIVER MODULE



Transmitter

Receiver

## KEY FEATURES

### TRANSMITTER

- 2.4 GHz 4CH TX module
- 1.0 W output
- Video scramble
- Transmits AV up to 1000M (Light-of-sight)
- ID addressing
- 5dBi high gain antenna
- 4 Channel selectable by switch
- Connect any camera or video signal to transmitter
- To extend the range via others high gain antenna
- Housed in a metal case
- DC 12V / 750mA output

### RECEIVER

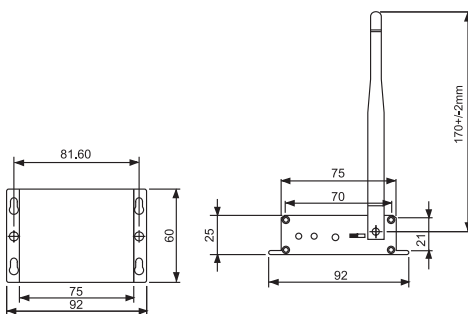
- 2.4 GHz 4CH TX module
- 1.0 W output
- Video scramble
- Transmits AV up to 1000M (Light-of-sight)
- ID addressing
- 5dBi high gain antenna
- 4 Channel selectable by switch
- Connect any camera or video signal to transmitter
- To extend the range via others high gain antenna
- Housed in a metal case
- DC 12V / 750mA output

## TECHNICAL SPECIFICATIONS

Model	WM-1000VHTR	
	TRANSMITTER	WM-1000VHTR RECEIVER
Lens	2.4GHZ 1W High Power Video+ Audio Transmitter	2.4GHZ Video +Audio Receiver
Frequency Channels	2352 ~ 2524 MHz, In-band or outband each 4-CH	CH1: 2413MHz, CH2: 2432MHz, CH3: 2451MHz, CH4: 2470MHz
TX Power	1.0W	10mW
RF Impedance	50 Ω Typical	50 Ω Typical
Video Input/ Output	1.0 Vp-p Composite @ 75Ω	1.0 Vp-p Composite @ 75Ω
Audio Input/Output	2.0 Vp-p Max. (600Ω)	2.0 Vp-p Max. (600Ω)
Alarm	Level Detection (5V TTL)	NC/NO/COM
Power Consumption	DC 12V/390mA (Start-up Current: DC 12V/650mA)	DC 12V/250mA
Operation Temp.	-10°C ~ 50°C	-10°C ~ 50°C
Storage Temp.	-30°C ~ 85°C	-30°C ~ 85°C
Dimensions	110 x 88 x 30mm (without Antenna)	110 x 88 x 30mm (without Antenna)

• Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION



# CAMERA LENS



CAMERA LENS

## TECHNICAL SPECIFICATIONS



Model	FLVD0538-R	
Focal Length (mm)	3.5 ~ 8	
Aperture (D/f)	1/1.4	
Mount	CS	
Format (inch)	1/3"	
Horizontal Field	80° ~ 36	
Operation	Focus	Manual
	Zoom	Manual
	Iris	AUTO (DC)
Dimension (mm)	33 x 47 x 45	
Weight (g)	95	
M.O.D. (m)	0.2	



Model	FLVD2812-R	
Focal Length (mm)	2.8 ~ 12	
Aperture (D/f)	1/1.6	
Mount	CS	
Format (inch)	1/3"	
Horizontal Field	92° ~ 24°	
Operation	Focus	Manual
	Zoom	Manual
	Iris	AUTO (DC)
Dimension (mm)	37.5 x 46 x 61.5	
Weight (g)	120	
M.O.D. (m)	0.2	



Model	FLVD0660-R	
Focal Length (mm)	6 ~ 60	
Aperture (D/f)	1/1.6	
Mount	CS	
Format (inch)	1/3"	
Horizontal Field	44° ~ 4.4°	
Operation	Focus	Manual
	Zoom	Manual
	Iris	AUTO (DC)
Dimension (mm)	37.5 x 46 x 70	
Weight (g)	130	
M.O.D. (m)	0.3	

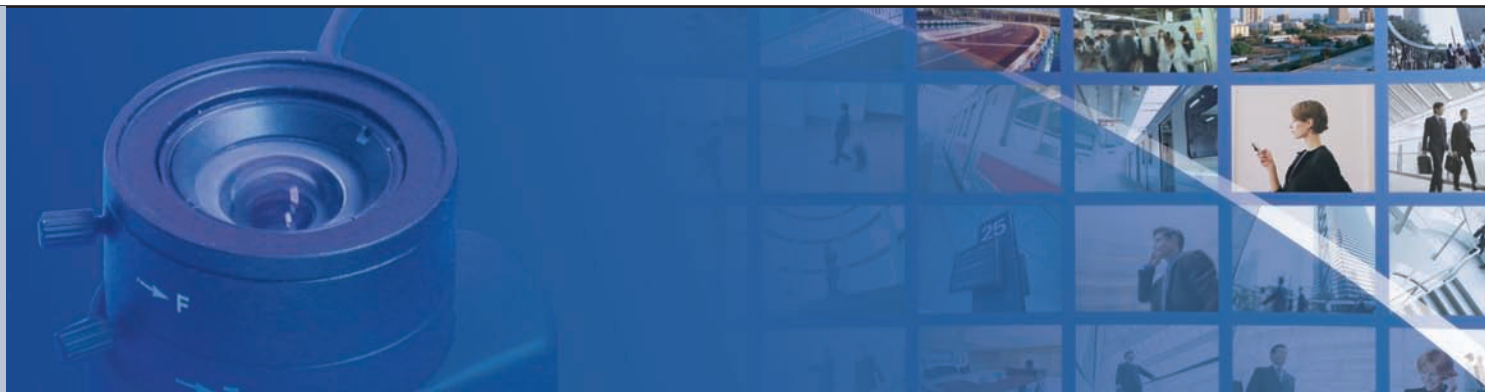


Model	FLVD0359-R	
Focal Length (mm)	3.5 ~ 9	
Aperture (D/f)	1/1.2	
Mount	CS	
Format (inch)	1/3"	
Horizontal Field	80° ~ 30°	
Operation	Focus	Manual
	Zoom	Manual
	Iris	AUTO (DC)
Dimension (mm)	29 x 43 x 42.9	
Weight (g)	66	
M.O.D. (m)	0.3	

\* Specifications are subjected to change without prior notice.

# SERVICE KIT MONITOR

CAMERA LENS



## TECHNICAL SPECIFICATIONS

Model	CLSM-411
Display Size	4"
Active Area	82.1(W) x 61.8(H) mm
Resolution	480 x 234 (High)
Contrast Ratio	150:1
Brightness	250cd / m2
Video System	NTSC / PAL
Power Source	DC12V 500mA
Video Input	1V p-p 75 ohm, RCA x 2
Audio Output	1 V p-p 10K ohm x 1
Audio Input	5W Max.
Power Consumption	-20°C ~ 80°C
Storage Temperature	0°C ~ 60°C
Dimension	139 x 115 x 36 mm
Accessory Included	Rechargeable Battery, Carrying Case, RCA to BNC Plug

\* Specifications are subjected to change without prior notice.

# POCKET CCTV TESTER



### PM-2502U

#### Video Tester

- CCTV Video field monitor, 2.5" LCD Monitor. With brightness, contrast, chroma adjustable

#### PTZ Controller

- With 2400 bps, 4800 bps, 9600 bps, 19200bps communication baud rate selectable via OSD menu
- With Pelco-D, Pelco-P etc. protocols selectable via OSD menu, strong compatibility with most of the PTZ cameras, Pelco-Coaxitron added, make testing easier for connecting only video cable to transmit both video and digital signal
- Camera address selectable from 1-255
- Can display the PTZ camera OSD menu and set all the PTZ functions With up, down, left right direction key and Iris open, close, focus, far, near, Zoom tele wide keys for the PTZ control

#### PTZ Command Analyzer

- Receive PTZ code so that user can analyze the PTZ command

#### Network Cable Tester

- With a RJ45 testing terminal (equipped in the package), can test the network cable status, LED display and wrong information display on the screen for 8 pins connection

#### RS485 Polarity Tester

- Can test the RS485 data cable polarity, display on the LCD screen with + or -

#### Package Includes

- CCTV Tester
- UTP test terminal
- 2pcs Rechargeable Li Battery
- DC12V 2A Power adapter
- Video cable 1M
- Necklace
- User Manual

#### General Information

- Work Temperature: -30°C---+70°C
- Work Humidity: 30%-90%
- Dimension: 170mm x 90mm x 45mm
- Inner box: 22.5 x 21.5 x 8.5cm
- Package: 10pcs /carton, 44 x 26.5 x 42cm / 7.8kg

# DVX-9000HD SERIES

## H.264 FULL D1 DVR



PC BASED DVR

### KEY FEATURES

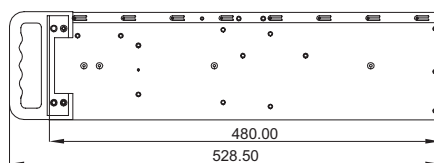
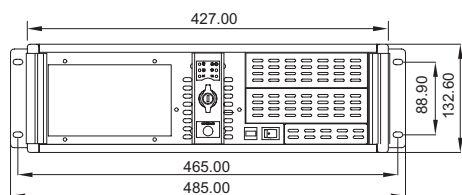
- Support 32CH D1 real-time recording
- H.264 Hardware Compression
- Multiple and configurable channels display on CCTV monitor
- 6 smart detections & 10 instant responses
- Multifunction playback with intelligent search
- E-map and GUI recording schedule
- POS and I/O device integration
- Triple monitor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

### TECHNICAL SPECIFICATIONS

Model	DVX-9008HD	DVX-9016HD	DVX-9032HD
Video Input	8	16	32
Audio Input	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	240 fps	480 fps	960 fps
Video Recording Frame	240 fps	480 fps	960 fps
Video Resolution	NTSC: 176 x 120, 352 x 240, 704 x 480 PAL: 176 x 144, 352 x 288, 704 x 576		
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)		

\* Specifications are subjected to change without prior notice.

### MECHANICAL DIMENSION



### ACCESSORIES



POS BOX

### 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 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 watermark verification tool

#### Instant alarm notification

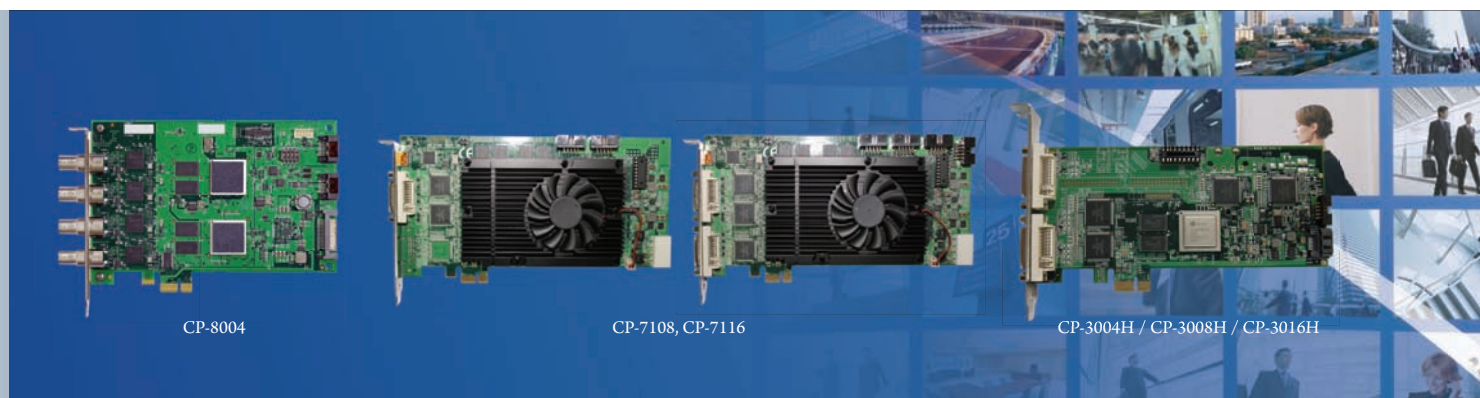
is the fastest and most cost efficient way to automatically respond to any smart detection event - 10 automatic instant alarm responses:

- 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

# H.264 INTELLIGENCE DVR CARD



PC BASED DVR



CP-8004

CP-7108, CP-7116

CP-3004H / CP-3008H / CP-3016H

## KEY FEATURES

- Supports megapixel IP cameras
- Supports H.264 compression format
- Triple monitor display
- Support for standard (4:3) and wide screen display (16:9, 16:10)
- Supports Joysticks
- E-map
- Instant Playback
- Two-way audio
- 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
- Up to 128 channels remote live view
- Supports transcode and multiple stream profiles
- Supports digital watermark
- Remote playback, remote backup, remote I/O control and remote desktop configuration
- Supported by Central Management System (CMS)
- Supports 49 brands of IP cameras and over 1000 models
- Supports 24 languages
- Supports Windows mobile , iPhone and BlackBerry clients
- Supports video looping output by HDMI and RCA only for CP-7108, CP-7116

## TECHNICAL SPECIFICATIONS

Model	CP-7108	CP-7116	CP-3004H	CP-3008H	CP-3016H	CP-8004
Video Input	8	16	4	8	16	4
Audio Input	8	16	4	8	16	-n/a
Maximum Cards	1 Card	1 Card	4 Cards	4 Cards	2 Cards	8 Cards
Maximum Channels	8	16	32			64
Display Rate	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps
	PAL	200 fps	400 fps	100 fps	200 fps	400 fps
Recording Rate @CIF	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps
	PAL	200 fps	400 fps	100 fps	200 fps	400 fps
Recording Rate @D1	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps
	PAL	200 fps	400 fps	100 fps	200 fps	400 fps
Video Resolution	NTSC	704 x 480;352 x 240;176 x 120			704 x 480;352 x 240;176 x 120	
	PAL	704 x 576;352 x 288;176 x 144			704 x 576;352 x 288;176 x 144	
TV Output Rate	w/ HDMI: RCA & HDMI: 10fps w/o HDMI: RCA: 25fps Only HDMI: HDMI: 14fps		None			None
Compression Format	Hardware Compression H.264		Hardware Compression H.264			Hardware Compression H.264
Interface	PCI-e		PCI-e			PCI-e x1
Available I/O Box	Support					
Hardware Watchdog	Support					
Dimension (mm)	167 (W) x 121 (H)	167 (W) x 121 (H)	167 (W) x 121 (H)	167 (W) x 121 (H)	216 (W) x 126 (H)	178 (W) x 126 (H)
System Minimum Requirement (per card)						
OS Supported	Windows 7 / Windows 2008 server					
CPU	Intel i3 540		Intel i3 540			Intel i3 540
RAM	2GB Above RAM amount is recommended based on one DVR card installation. For system with multiple DVR cards stacked 1G RAM for system under 16ch 2G RAM for system under 32ch and 3G RAM for system with 32ch or above are recommended.					
HDD	250 GB					
Mother-board	Intel P45 or P43 chip or above MB vendor ASUS Gigabyte or MSI with Intel Chipset recommended					
Display	Win7: ATI Radeon 3850/4850 are recommended					
* For stability reason we strongly recommend to apply a desktop with a system fan when using CP-7108, CP-7116 , CP-3004H, CP-3008H, CP-3016H series.						
** Any combination of CP-7108, CP-7116 cards is possible with a limitation on the maximum 32 analog to be manage on single machine, and video looping maximum up to 16 channels						

• Specifications are subjected to change without prior notice.

## ACCESSORIES



POS BOX

# H.264 INTELLIGENCE DVR CARD

## ❖ System, Setting, Management & Integration:

- Open Platform: Supports over 1000 models of IP cameras, megapixel cameras and video servers from 49 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 devices, SDK for access control integration available upon request.
- Multi-site/Multi-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.  
\*The maximum number of camera connections depends on the server's hardware configuration and the total bit rate of the IP cameras. Please check with technical support for calculation
- Multiple Video Clients: can stream video to multiple Remote Live Viewers, web clients and mobile clients simultaneously.
- Intelligent Video Analytics: FINE IVS supports 6 types of video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost. Each IVS 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 FINE DVX series, NVR-2U series. 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. Users 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  
\*The maximum number of camera connections depends on the server's hardware configuration and the total bit rate of the IP cameras. Please check with technical support for calculation
- Transcoding: Record and display live video at different frame rate and resolution.
- Advanced E-Map: Capability to import custom image file, place the cameras and I/O on the map to indicate where events are being 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 available IP cameras within the network (camera must support UPnP protocol). For cameras that don't support UPnP, users 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: Data streaming bandwidth of each remote client connection to the FINE DVX series, NVR-2U series. 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: FINE DVX series, NVR-2U series 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 FINE DVX series, NVR-2U series. Preset points and patrol functions are also available on many camera models.
- Monitor Resolution: Supports 1024x768, 1200x900, 1280x1024, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200 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.
- Instant Playback: Allow to play the last few minutes of any live video channel on Main Console and Remote Live View

## ❖ 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, foreign 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 backup to local HD, CD, and DVD.
- Log data: Unusual event, system log, counting application, POS log and export and backup 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, or external drive.

## ❖ Remote operations

- Multiple Live View Display: Streaming live video from multiple FINE DVX series, NVR-2U series simultaneously. Dual monitors support with up to 128 channels per monitor (64 channels per monitor). \*The maximum number of camera connections depends on the server's hardware configuration and the total bit rate of the IP cameras. Please check with technical support for calculation
- Multi Playback Channels Display: Remote playback of 16 channels recording from any one of the FINE DVX series, NVR-2U series.
- Intelligent PTZ: Joystick support on PTZ cameras and software enabled digital PTZ function are both available in FINE DVX series, NVR-2U series. 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 outputs and monitor input status.
- E-Map: A map view of where each camera and I/O devices are located with a convenient preview window.
- Two-way Audio: Listen and record audio from camera's microphone. Talk to IP camera's speaker.
- Remote Backup: Backup the video into .DAT format with a player attached for easy achieve and viewing purposes.
- Web-browser (client): Display up to 64 channels of live video stream or 16 channels of playback in I.E. from any single FINE DVX series, NVR-2U series.
- PDA Viewer: Up to 16 channels snapshot or 1 channel live display; PTZ and I/O control.
- iPhone: Support iPhone application client and browser client (safari) to live view video and control PTZ functions.
- BlackBerry: Support BlackBerry application client to live view video and control PTZ functions.

## ❖ Extension Service

- Central Management System: Ultimate central monitoring solution for grand scale projects and projects with multiple sites. Fully compatible with all FINE DVX series, NVR-2U series.
- 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: FINE DVX series, NVR-2U series supports mobile devices through 3G network to stream live view video.

# H.264 INTELLIGENCE DVR CARD

## External Device:

- Point of Sale (POS): Point of Sales system works on FINE DVX series, NVR-2U series by overlaying the transaction text from cash register onto live video channels. All POS recordings are searchable.
- External I/O capacity: Please refer to our I/O box section: CP-SIO4 , CP-SI16 , CP-SO16.
- ImmerVision Lens: Lens supported.

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

Support Language					
Chinese (Simplified )	Chinese (Traditional)	Czech	Danish		
English	Finnish	French	German		
Greek	Hebrew	Italian	Japanese		
Korean	Norway	Polish	Portuguese(Brazil)		
Portuguese(Portugal)	Russian	Serbian	Slovak		
Spanish	Swedish	Thai	Turkish		
IP Camera Brand(s) Supported					
IP Camera Brand(s) Supported	FINE	ACTi	ARM	Atlantis	Axis
	Basler	Bosch	Brickcom	Camtron	Cisco
	CNB	Digimerge	D-Link	Dynacolor	ENEO
	Etrovision	EverFocus	HIKVision	IQinvision	JVC
	Hitron	Honeywell	Icantek	Lumenera	Mobotix
	LevelOne	Linksys	Loxex	Pelco	Pixord
	Moxa	Onvif	Panasonic	Santec	Sanyo
Planet	Samsung				
	Seorim	Sony	StarDot	Toshiba	Truen
	Vidosec	Vivotek	Y-cam	Zavio	Arecont

## User Interface



- Live



- Playback



- I.E



# POS BOX SOLUTION



## KEY FEATURES

- Support all FINEST NVR/DVX/NDVR 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 – envelop 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

## TECHNICAL SPECIFICATIONS

Model	POS BOX SOLUTION
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 are subjected to change without prior notice.

## SOFTWARE 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

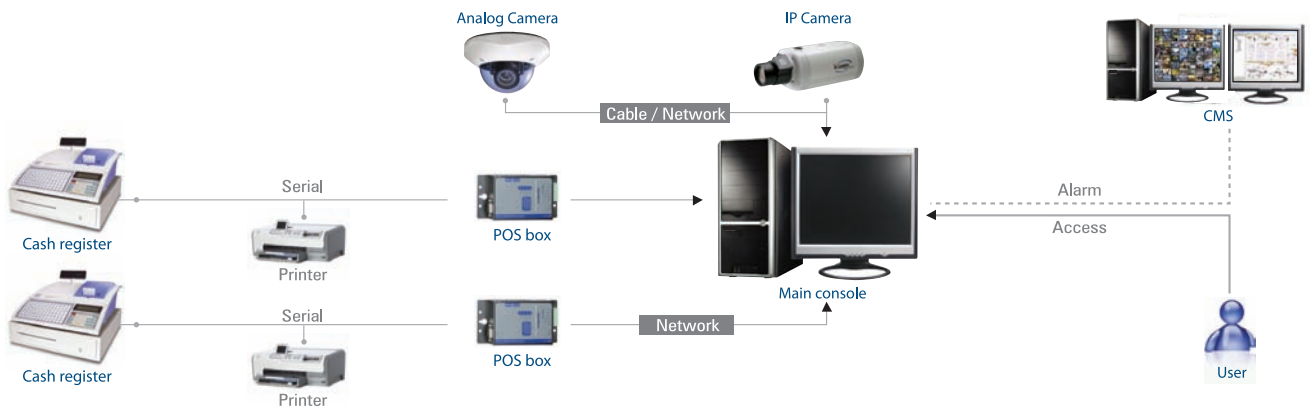
### Remote Access

- 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

## APPLICATION DIAGRAM

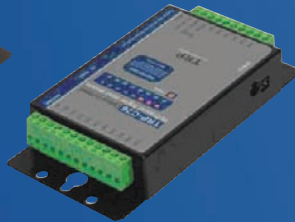


# I/O DEVICE FOR H.264 HYBRID & IP SURVEILLANCE SYSTEMS

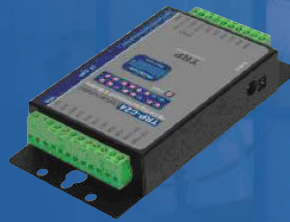
I/O DEVICE



CP-SIO44



CP-SI16



CP-SO16

**CP-SIO4** provides with 4 optical isolated digital input channels and 4 power relays output. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. CP-SIO4 can be easily control by SP-RS001 (RS-232 to RS-485 converter).

## TECHNICAL SPECIFICATIONS

Model	CP-SIO44
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 are subjected to change without prior notice.

**CP-SI16** provides 16 optical isolated digital output channels that allow you to output open collector signal to driven your devices on RS485 network. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. All inputs are equipped with photo-couplers to protect the module against high voltage spikes and ground potential differences. It can be easily control by SP-RS001 (RS-232 to RS-485 converter).

## TECHNICAL SPECIFICATIONS

Model	CP-SI16
Output Channel	16 digital output channels
Communication Interface	DC +10V to +15V
RS-485 differential 2 half / duplex wires	500 mA
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

• Specifications are subjected to change without prior notice.

**CP-SO16** provides 16 optical isolated digital input channels and all of them can be used as counter. All channel features screw terminals for convenient connection of field signals as well as LED's to indicate channel status. All inputs are equipped with photo-couplers to protect the module against high voltage spikes and ground potential differences.

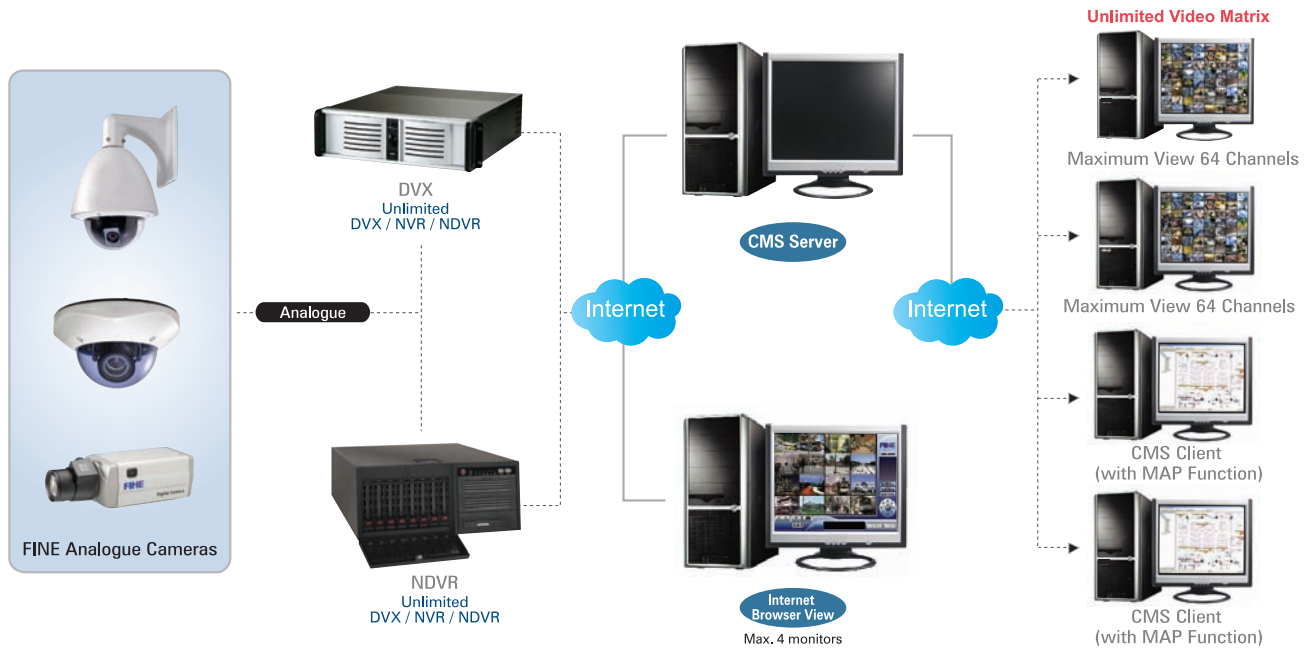
## TECHNICAL SPECIFICATIONS

Model	CP-SO16
Input Channel	16 digital input channels with counter
Counter Channel/Frequency	16 / 100Hz
Communication Interface	500 mA
RS-485 differential 2 half / duplex wires	Baud rate from 1.2 Kbps to 115.2 Kbps
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

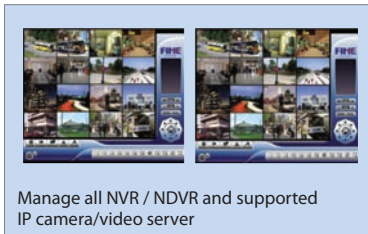
• Specifications are subjected to change without prior notice.

# CENTRAL MANAGEMENT SYSTEM (NCS)

## SOFTWARE BLOCK DIAGRAM

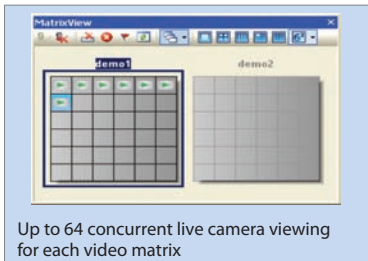


NCS



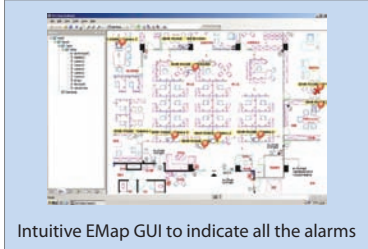
### This seamless management of digital video, audio and data is a powerful solution for large scale installations

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.



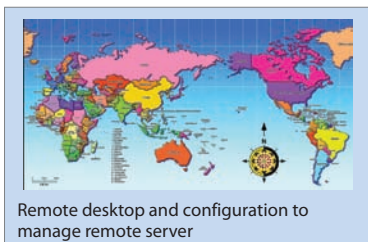
## KEY FEATURES

- 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 &	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.

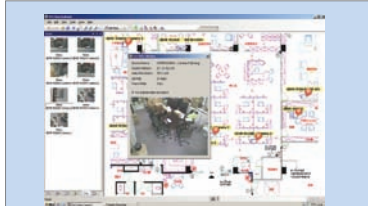


# CENTRAL MANAGEMENT SYSTEM (NCS)

## TECHNICAL DETAILS



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



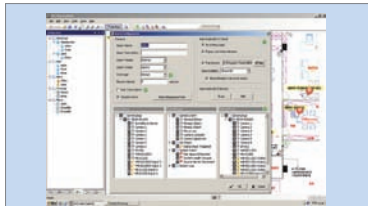
Alarm Live Video Pop up notification



Remote Playback Window



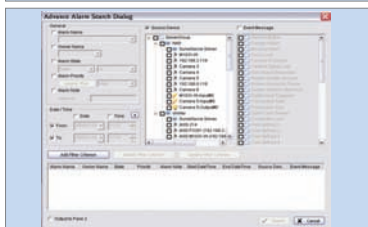
Remote Back up Recorded Video



Low Disk Space, Disconnect Servers,  
Unusual System Health Alarm



Remote PTZ control



Advanced Alarm Search

### ■ NCS Alarm Server

- EUltimate recording servers: Centralized management station supports unlimited number of recording servers (NDVR, NVR, DVR and NVRmini).
- EClient/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.
- ESQL database: Uses SQL Server 2005 Express to store all alarm logs.
- EInstant 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.
- EUser 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.
- ESmart 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 station.
- ELicense Management: To register and validate your licenses, the system offers easy-to-use online activation via the Internet and alternatively

### ■ NCS Client

#### Operator Mode:

- EMulti-Monitor scenarios:  
Monitor 1 – E-Map/Navigation panel  
Monitor 2 – Alarm panel, event list, remote playback  
Monitor 3-N – Live video display matrix
- EMap centric Intuitive operation: All NCS functions are accessible directly from the E-map.
- EAutomatic startup and login: NCS Alarm Server/Client/Matrix can start up and login automatically when the servers restart.
- EAutomatic device synchronization: Automatically synchronize for all of the IP cameras, I/O device and POS in the servers.

### ■ E-Map

- EHierarchical map tree: Tree structured map layout supporting unlimited maps layers.
- ECustom 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.
- EInstant 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.
- EIntuitive 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.
- EUser-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.
- EMultiple image formats: Import any image in BMP, GIF, JPEG, PNG, and TIFF formats.

### ■ Alarm Management

- EPowerful 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.
- EAlarm Priority: Assign alarm priorities (critical, high, normal, low) to each alarm to increase the efficiency in response and data mining.
- EAlarm Coverage: Operator can schedule each alarms to be active at a specific times or time intervals.
- EAlarm Management Guide: Attach an alarm management guide to each of the alarms so the operator knows how to respond to different alarms.
- EAlarm 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.
- EPrint Alarm: Client can print out a detailed alarm report with snapshots, alarm guide and timestamp included.
- EPowerful 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.
- EExport Alarm list: User can export alarm history to Excel table.

### ■ NCS Matrix:

- ELive Matrix: NCS Matrix stream and display live video from any recording server (NVR/DVR/Hybrid/NVRmini) as commanded by NCS client.
- EMulti-channel live view: Each matrix computer can display up to 64 channels of live video per monitor and supports multiple monitor display.
- EDisplay layout: Supports 9 different display layouts (1/4/9/12+1/16/25/36/49/64).
- ECamera sequencing (auto scan): Matrix can loop through all the cameras automatically at a specified interval.
- EPTZ Control: Full functional PTZ control panel on the NCS client can be used to pan, tile and zoom the cameras displaying on NCS matrix.
- EAlarm Matrix: Matrix can popup alarmed cameras instantly upon an unusual event on any matrix monitor specified.
- EMatrix Profile: Each user/user group can be assigned to a different matrix profile with specific camera viewing privilege.
- ETranscoding: Live display at different frame rate and resolution
- EAudio: Listen live and recorded audio from cameras' microphone through NCS Client.



### ■ Extension:

#### Remote Desktop

- EBuild-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

- EMulti-channel Remote Playback: Remote playback of 16 channels recording from any one of the servers (NVR, DVR, NDVR and NVRmini).
- ELayout: Playback in full screen, single channel, 4, 9 and 16 channel simultaneously.
- EExport 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.
- ESmart 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 (NCS)

## TECHNICAL SPECIFICATIONS

Function	Description
<b>Key Features</b>	
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.
<b>Triple Monitor Scenario</b>	
Default Monitor #1	Navigation Panel / Map Section
Default Monitor #2	Live Matrix System
Default Monitor #3	Alarm List / Message List / Remote Playback
<b>CMS Server</b>	
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
<b>E-Map</b>	
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
<b>Alarm Management</b>	
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

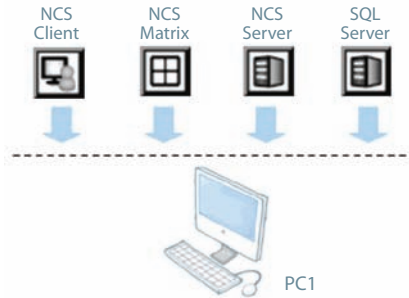
Function	Description					
<b>Matrix System</b>						
Live Viewing	Up to 64 concurrent camera viewing					
Grid Type	1, 4, 9, 12+1, 16, 25, 36, 49, 64					
View Type	Flexible auto scan mechanism and full screen viewing					
Automatically Popup	Show the live video associated with alarms					
PTZ Panel	Floating PTZ panel to manipulate cameras on the matrix system					
Joystick Support	Control PTZ camera by Joystick via NCS Client					
<b>Remote Playback System</b>						
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					
<b>Miscellaneous</b>						
UserGroup Authority	Alarm Management					
	View Alarm Image					
	View Live Video					
	View Recorded Video					
	PTZ Control					
	Control Digital Output					
	Remote Desktop					
User Authority	View and Search POS transaction					
	Access Devices					
	User/Password					
	Phone Number					
	Email / Phone number					
Built-in Remote Desktop	UserGroup					
	Coverage					
	Matrix Profile					
<b>Matrix System</b>						
IP Camera Brand(s)	FINE	Arecont	Atlantis	Axis	Basler	
	Cisco	Digimerge	D-Link	Dynacolor	Etrovision	
	EverFocus	Eyeview	Vivotek	HIKVision	Hitron	
	Icetek	IQinvision	JVC	LevelOne	Linksys	
	Loxtek	Lumenera	Mobotix	Moxa	Panasonic (PCC)	
	Panasonic (PSS)	Pixord	Planet	Samsung		
	Seorim	Sony	Toshiba	Truen		
	Y-cam	Zavio	ACTi	Sanyo		
	Camera Format	H.264, MPEG4, MJPEG, MxPEG				
	<b>Supporting Language</b>					
Bulgarian	Chinese (Simplified)	Chinese (Traditional)	Danish	English	Finnish	
Italian	Portuguese (Brazil)	Spanish				

\* Specifications are subjected to change without prior notice.

# CMS HARDWARE REQUIREMENT

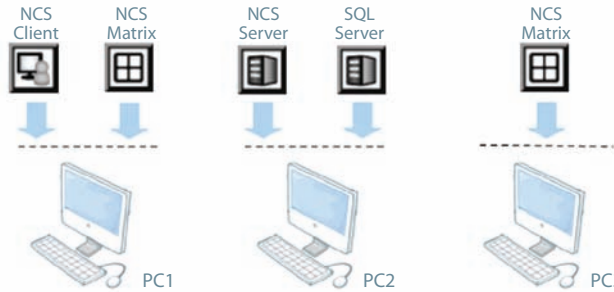
There are three scenarios for CMS system setup. The system requirements for each scenario are detailed below.

## SCENARIO A: Using one PC for all installed elements



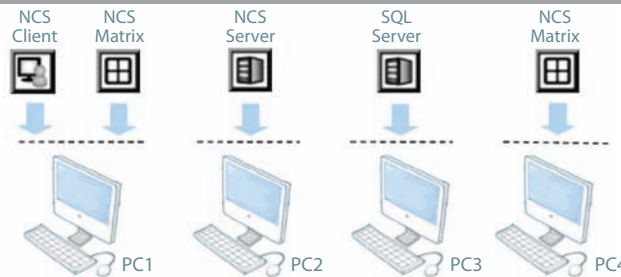
Model	PC1
CPU	Intel Core 2 Quad Q6660 @ 2400MHz
RAM	2 GB
Hard Disk	250 GB or above
Mother-board	Intel 945 or 965 chip (for single monitor) Intel P35/975 chip or nVidia nForce 650i chip (for multiple monitors)
Display	ATI X1600 or above, nVIDIA GeForce 7000series or above
Ethernet	100 baseT or above, Gigabit LAN recommended
OS	MS Windows XP Pro SP2 / 2003

## SCENARIO B: Using three PCs with CMS Client and CMS Matrix on PC1, CMS Server and SQL SERVER ON PC2, AND CMS Matrix ON PC3



Model	PC1	PC2	PC3
CPU	Intel Core 2 Quad Q6660 @ 2400MHz	Intel Core 2 Duo E4500	Intel Core 2 Quad Q6660 @ 2400MHz
RAM	2 GB	2 GB	2 GB
Hard Disk	250 GB or above	250 GB or above	250 GB or above
Display	ATI X1600 or above	ATI X300 or above	ATI X1600 or above
Mother-board	Intel 945 or 965 chip (for single monitor) Intel P35/975 chip or nVidia nForce 650i chip (for multiple monitors)		
Ethernet	100 baseT or above, Gigabit LAN recommended		
OS	MS Windows XP Pro SP2 / 2003		

## SCENARIO C: Using four PCs with CMS Client and CMS Matrix on PC1, CMS Server on PC2, SQL Server on PC3, and CMS Matrix on PC4



Model	PC1	PC2	PC3	PC4
CPU	Intel Core 2 Quad Q6660 @ 2400MHz	Intel Pentium D 2800 MHz	Intel Pentium D 2800 MHz	Intel Core 2 Quad Q6660 @ 2400MHz
RAM	2 GB	1 GB	1 GB	2 GB
Hard Disk	250 GB or above	250 GB or above, 250 GB or above, 250 GB or above		
Display	ATI X1600 or above	ATI X300 or above, ATI X300 or above, ATI X1600 or above		
Mother-board	Intel 945 or 965 chip (for single monitor) Intel P35/975 chip or nVidia nForce 650i chip (for multiple monitors)			
Ethernet	100 baseT or above, Gigabit LAN recommended			
OS	MS Windows XP Pro SP2 / 2003			

### Multiple Monitor Configuration:

For a PC running the CMS Client and CMS Matrix, it is suggested that three monitors are used: one to display the Map window and the System Configuration window, one to display the Alarm Overview window, and one to display the live video feed matrix. This enables efficient use of the system and saves hardware costs. PCs using multiple monitors in this way should have a Intel P35/975x motherboard which can support two display cards. Each display card should be the same model, to avoid hardware conflicts.

# 19" 4 CHANNEL DVR COMBO MONITOR



COMBO DVR

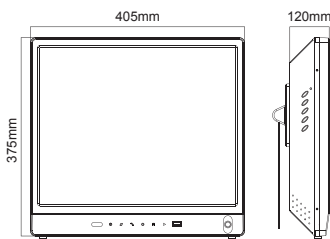
## KEY FEATURES

- Touch Screen display integrated with LCD for TFDR-1904TH
- NTSC/PAL auto detect
- Supports up to 1280 x 1024SXGA high resolution
- High contrast ratio up to 1000:1
- 4CH DVR with H.264 Video compression
- Provide Graphical User Interface (GUI) and mouse/touch screen for easier and user friendly configuration and operation.
- Supports smart search function for faster and easier playback retrieval
- Picture-in-picture display & channel screen popup on monitor/sensor
- Role-based multiple network users access to exclusive channel view & operation

## TECHNICAL SPECIFICATIONS

Model	TFDR-1904	TFDR-1904TH
LCD Size	19"	
Resolution	1280 X 1024(SXGA)	
Viewing Angle	170/160 (Typ.)	
Brightness	250 cd/m2	
Contrast Ratio	1000 : 1	
Response Time (Tr +Tf)	5ms	
Video System	NTSC / PAL	
Video Input	BNC X 4 ,1.0Vp-p , 75ohm	
Video Output	BNC X 2 ,1.0Vp-p , 75ohm	
Audio Input	1ch , RCA	
Audio Output	1ch , RCA	
Mouse	USB Mouse	
IR Remote Control	Yes	
Touch Panel Control	-n/a	Yes
Internal HDD	SATA HDD X1, Max 2TB	
Display Division	1 , 4, seq.	
Zoom	2X-8X ( PLAYBACK ZOOM SUPPORT)	
Recording Compression	H.264 main profile	
Recording Mode	manual , schedule , alarm , holiday	
Resolution	720x480, 720x240, 352x240 (NTSC) 720x576, 720x288, 352x288 (PAL)	
Frame Rate	60, 120, 120 FPS (NTSC) 50, 100, 100 FPS (PAL)	
Quality	Highest , High , Normal , Low , Lowest	
Motion Detection	Sensitivity , 15 Level , 16X12 Grid	
Alarm	16MB (Pre-alarm) 1-999 sec (post-alarm)	
Water Mark	Yes	
Playback Speed	normal , REW & FF (2X /4X / 8X / 16X / 32X / 64X )	
Search Method	Segment, Time, Event, Calendar	
Remote Software	CMS, IE Browser, Mobile	
Remote Operation	VIRTUAL DVR- SAME AS LOCAL OSD	
Network Service	TCP/IP, HTTP, DHCP, SMTP(SSL), ADSL, LAN, DDNS	
3G Device	WIN 5.0, 6.0, SYMBIAN, iPhone, PDA, BLACKBERRY	
GUI Interface	Supported GUI 16 BIT True Color	
Dome Protocol	PELCO P, PELCO D	
External	USB X1 (FRONT PANEL)	
Network Backup	Yes	
File	H.264 compression /AVI Format	

## MECHANICAL DIMENSION



\* Specifications are subjected to change without prior notice.

# 19" 8 CHANNEL DVR COMBO MONITOR



COMBO DVR

## KEY FEATURES

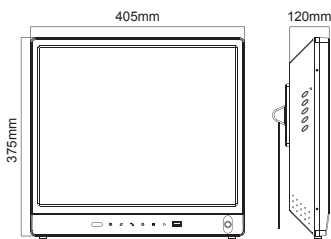
- Touch Screen display integrated with LCD for TFDR-1908TH
- NTSC/PAL auto detect
- Supports up to 1280 x 1024SXGA high resolution
- High contrast ratio up to 1000:1
- 8CH DVR with H.264 Video compression
- Provide Graphical User Interface (GUI) and mouse/touch screen for easier and user friendly configuration and operation.
- Supports smart search function for faster and easier playback retrieval
- Picture-in-picture display & channel screen popup on monitor/sensor
- Role-based multiple network users access to exclusive channel view & operation

## TECHNICAL SPECIFICATIONS

Model	TFDR-1908	TFDR-1908TH
LCD Size	19"	
Resolution	1280 X 1024(SXGA)	
Viewing Angle	170/160 (Typ.)	
Brightness	250 cd/m2	
Contrast Ratio	1000 : 1	
Response Time (Tr +Tf)	5ms	
Video System	NTSC / PAL	
Video Input	BNC X 8 ,1.0Vp-p , 75ohm	
Video Output	BNC X 2 ,1.0Vp-p , 75ohm	
Audio Input	4ch , RCA	
Audio Output	2ch , RCA	
Mouse	USB Mouse	
IR Remote Control	Yes	
Touch Panel Control	-n/a	Yes
Internal HDD	SATA HDD X1, Max 2TB	
Display Division	1 , 4 , 8, seq.	
Zoom	2X-8X ( PLAYBACK ZOOM SUPPORT)	
Recording Compression	H.264 main profile	
Recording Mode	manual , schedule , alarm , holiday	
Resolution	720x480 , 720x240 , 352x240 (NTSC) 720x576 , 720x288 , 352x288 (PAL)	
Frame Rate	60 , 120 , 120 FPS (NTSC) 50 , 100 , 100 FPS (PAL)	
Quality	Highest , High , Normal , Low , Lowest	
Motion Detection	Sensitivity , 15 Level , 16X12 Grid	
Alarm	16MB (Pre-alarm) 1-999 sec (post-alarm)	
Water Mark	Yes	
Playback Speed	normal, REW & FF (2X /4X / 8X / 16X / 32X / 64X )	
Search Method	Segment ,Time, Event , Calendar	
Remote Software	CMS, IE Browser , Mobile	
Remote Operation	VIRTUAL DVR- SAME AS LOCAL OSD	
Network Service	TCP/IP, HTTP, DHCP, SMTP(SSL), ADSL, LAN, DDNS	
3G Device	WIN 5.0, 6.0, SYMBIAN, iPhone, PDA, BLACKBERRY	
GUI Interface	Supported GUI 16 BIT True Color	
Dome Protocol	PELCO P, PELCO D	
External	USB X1 (FRONT PANEL)	
Network Backup	Yes	
File	H.264 compression /AVI Format	

\* Specifications are subjected to change without prior notice.

## MECHANICAL DIMENSION





# 10CH CHANNEL HD-D1 HYBRID DVR



STAND ALONE DVR

## KEY FEATURES

- H.264 Hardware Compression
- 2HD 8D1 Channel
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality  
HD Multiplexer  
Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-2H8D	
Product Name		10CH HD-D1 Hybrid DVR (2HD-8D1)	
Camera Input		10 CH	
Video	Output	Max. 1920x1080 2 independent output: 1 HDMI with Audio, 1 VGA	
	Input	HD-SDI camera (1080p / 720p) x 2 + (720x480 / 720x576) analog camera x 8	
Audio	Output	2 RCA	
	Input	8 x RCA + 2 x HD-SDI	
Operating System		Embedded Linux OS	
Audio	SATA Devices	Max. 6 x SATA Devices (HDDx6, HDDx5 + eSATAx1, HDDx5 + DVD±RWx1, HDDx4 + DVD±RWx1 + eSATAx1)	
	External HDD	Yes (e-SATA)	
	Sensor In (NO, NC)	Sensor-in x 10	
	Relay out	Relay-out x 4	
	Serial Interface	RS-485 (Inx1, Outx1)	
	USB	2 x USB2.0	
	Dimension (mm)	430(W) x 55(H) x 300(D)	
	Weight	2.6Kg	
	(w/o HDD/DVD±RW )		
	Power Input	AC100-240V DC12V 5A	
Display	Power	60W	
	Speed	1080p / 720p 60fps, D1 240 fps (NTSC) / 200 fps (PAL)	
	Resolution (Pixel)	1080p / 720p / 720 x 480 (NTSC), 720 x 576 (PAL)	
	Split screen	1,4,10 SEQ.	
	Auto Channel Switching	Switching time: 1 ~ 99 sec	
	Mode	Zoom ( Digital x2 ~ x8 ), PIP, Auto SEQ.	
	Compression	H.264 Baseline	
Recording	Dual Stream Resolution (Pixel)	Main (Recording)	1080p / 720p for CH 1 ~ 2 704x480, 704x240, 352x240 (NTSC) / 704x576, 704x288, 352x288 (PAL) for CH 3 ~ 8
		Sub (Network)	640x360 / 320x180, 352x240, 176x240, 176x120 (NTSC) / 352x288, 176x288, 176x144 (PAL)
	Picture quality	10~100 levels for adjustment	
	Mode	Normal, Manual, Event, Schedule	
	Speed	NTSC PAL	
	Pre-Alarm	1080p real-time(for CH 1 ~ 2) & D1 real-time(for CH 3 ~ CH 10)	
	Post-Alarm	1080p real-time(for CH 1 ~ 2) & D1 real-time(for CH 3 ~ CH 10)	
	Watermark	1 ~ 10 SEC	
	Display	Yes	
	Playback	Search mode	1, 4, 10
Zoom		Date/time, Event	
Snapshot		Digital ( x2 ~ x8 )	
Speed		Yes	
Device		Play, Pause, Stop, Slow(1/2, 1/4, 1/8), FF(4, 8, 16, 32), REW(4, 8, 16, 32), Frame Step, Seek Bar	
Interface		Int. HDD	
Network	Network Interface	10/100/1000 Ethernet	
	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP, DDNS	
	Application	Windows XP/VISTA/7, Mac OS X	
	Remote Software	DVR, IE Browser	
	Account	1 Admin + 8 Users	
	CMS	CMS for Windows XP, Windows Vista, Windows 7	
Backup	Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android	
	Event Transport	E-mail	
	Interface	USB 2.0 or SATA	
	Audio Backup	Yes	
Alarm	Network	Yes	
	Backup Device (Option)	DVR / USB Flash Drive / USB DVD±RW / SATA DVD±RW	
	Motion Detection	Sensitivity : 100 levels for each channel Area : Configurable detection area	
OSD&DVR Control	Event log	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)	
	GUI	16-bit True Color	
	Multi-Language	Supported	
	Camera Title	Multi-Language	
	USB Mouse	Yes	
	Touch Panel	Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)	
Control	Remote Controller	IR Remote Control	
	System Upgrade	USB	
	Pan/Tilt/Zoom Control	Control From RS-485 Interface	

\* Specifications are subjected to change without prior notice.

# 20CH CHANNEL HD-D1 HYBRID DVR

STAND ALONE DVR



## KEY FEATURES

- H.264 Hardware Compression
- 4HD 16D1 Channel
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- HD Multiplexer
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-4H16D	
Product Name		20CH HD-D1 Hybrid DVR (4HD-16D1)	
Camera Input		20 CH	
Video	Output	Max. 1920x1080 2 independent output: 1 HDMI with Audio, 1 VGA	
	Input	HD-SDI camera (1080p / 720p) x 4 + (720x480 / 720x576) analog camera x 16	
Audio	Output	2 RCA	
	Input	16 x RCA + 4 x HD-SDI	
System	Operating System	Embedded Linux OS	
	SATA Devices	Max. 6 x SATA Devices (HDDx6, HDDx5 + eSATAx1, HDDx5 + DVD±RWx1, HDDx4 + DVD±RWx1 + eSATAx1)	
	External HDD	Yes (e-SATA)	
	Sensor In (NO, NC)	Sensor-in x 20	
	Relay out	Relay-out x 4	
	Serial Interface	RS-485 (Inx1, Outx1)	
	USB	2 x USB2.0	
	Dimension ( mm )	430(W) x 55(H) x 300(D)	
	Weight	2.6Kg	
	Power Input	AC100-240V DC12V 5A	
Display	Speed	60W	
	Resolution (Pixel)	1080p/720p 60fps, D1 240 fps (NTSC) / 200 fps (PAL) 1080p / 720p / 720x480(NTSC), 720x576(PAL)	
	Split screen	1, 4, 10, 16, 20 SEQ.	
	Auto Channel Switching	Switching time : 1 ~ 99 sec	
	Mode	Zoom ( Digital x2~ x8 ), PIP, Auto SEQ.	
	Compression	H.264 Baseline	
Recording	Dual Stream Resolution (Pixel)	Main (Recording)	1080p / 720p for CH 1 ~ 4 704x480, 704x240, 352x240 (NTSC) / 704x576, 704x288, 352x288 (PAL) for CH 5 ~ 20
		Sub (Network)	640x360 / 320x180 352x240, 176x240, 176x120 (NTSC) / 352x288, 176x288, 176x144 (PAL)
	Picture quality	10~100 levels for adjustment	
	Mode	Normal, Manual, Event, Schedule	
	Speed	NTSC PAL 1080p real-time(for CH 1 ~ 4) & D1 real-time(for CH 5 ~ CH 20) 1080p real-time(for CH 1 ~ 4) & D1 real-time(for CH 5 ~ CH 20)	
Playback	Pre-Alarm	1 ~ 10 SEC	
	Post-Alarm	1 ~ 100 SEC	
	Watermark	Yes	
	Display	1, 4, 10, 16, 20	
	Search mode	Date/time, Event	
Network	Zoom	Digital ( x2 ~ x8 )	
	Snapshot	Yes	
	Speed	Play, Pause, Stop, Slow(1/2, 1/4, 1/8), FF(4, 8, 16, 32), REW(4, 8, 16, 32), Frame Step, Seek Bar	
	Device	Int. HDD	
	Network Interface	10/100/1000 Ethernet	
Backup	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP, DDNS	
	Application	Windows XP/VISTA/7, Mac OS X	
	Remote Software	DVR, IE Browser	
	Account	1 Admin + 8 Users	
	CMS	CMS for Windows XP, Windows Vista, Windows 7	
Alarm	Mobile Device	Windows Phone, Blackberry, iPhone, iPad, Android	
	Event Transport	E-mail	
	Interface	USB 2.0 or SATA	
	Audio Backup	Yes	
	Network	Yes	
OSD&DVR Control	Backup Device (Option)	DVR / USB Flash Drive / USB DVD±RW / SATA DVD±RW	
	Motion Detection	Sensitivity : 100 levels for each channel Area : Configurable detection area	
	Event log	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)	
Control	GUI	16-bit True Color	
	Multi-Language	Supported	
	Camera Title	Multi-Language	
	USB Mouse	Yes	
	Touch Panel	Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)	
Pan/Tilt/Zoom Control	Remote Controller	IR Remote Control	
	System Upgrade	USB	
	Pan/Tilt/Zoom Control	Control From RS-485 Interface	

\* Specifications are subjected to change without prior notice.

# 4 CHANNEL H.264 HD STANDALONE DVR



STAND ALONE DVR

## KEY FEATURES

- H.264 Hardware Compression
- 4 Channel HD (1080P) Recording
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- HD Multiplexer
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-HD9413
Camera Input		4 CH
Video	Input	4 HD-SDI
	Output	1 HDMI (1920 x 1080) + Audio / 1 VGA (1920 x 1080)
Audio	Input	4 HD-SDI
	Output	2 RCA
Operating System		Embedded Linux OS
Internal HDD		Support Max. 6 SATA Device (HDDx4, HDDx4 + eSATAx1, HDDx4 + DVDx1, HDDx4 + DVDx1 + eSATAx1)
External HDD		eSATA
Sensor Input / Relay Output		4 in / 4 out
Serial Interface		RS-485
USB		2 x USB2.0
Recording	Speed	1080P / 720P, 120fps
	Resolution (Pixel)	1920 x 1080, 1280 x 720
	Split Screen	1, 4, SEQ.
	Auto Channel Switching Mode	Switching time: 1 ~ 99 sec
	Compression	Zoom (Digital x 2 ~ x 8), PIP, Auto SEQ. H.264 ASP (Internet Transmission: H.264)
	Dual Stream Resolution (pixel)	Main (recording) 1920 x 1080, 1280 x 720 Sub (network) 640 x 360, 320 x 180
	Picture Quality	10 ~ 100 levels for adjustment
	Mode	Manual, Motion, Alarm, Schedule
	Priority	Manual -> Alarm, Motion -> Schedule
	Speed	60fps (1920 x 1080), 120fps (1280 x 720)
	Pre-Alarm	1 ~ 10 sec
	Post-Alarm	1 ~ 100 sec
	Watermark	Yes
	Playback	Display
Search Mode		Date, Time, Event (motion, alarm) camera
Zoom		Digital x2 ~ x 8
Speed		Seek, Normal, REW & FF, Frame to frame, Pause
Network	Device	Internal HDD
	Network Interface	Ethernet
	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPOE(ADSL)
	Application	Windows XP/VISTA / 7 (PC Client System)
	Remote Software	License Application Software, IE Browser
	Account	1 Admin + 8 Users
	CMS	Yes
Backup	3G/ GPRS	Symbian OS, Windows Mobile, JAVA, Blackberry, iPhone, Android phone
	Event Transport	E-mail
	Interface	USB2.0 or SATA
	Audio Backup	YES
Alarm	Network	YES
	Backup device (Option)	Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW
	Motion Detection	Detect Frames: Unlimited / channel Sensitivity: 100 levels for each channel
	Alarm Hold Time	Area: Programmable motion detection area for each camera individually 1~60 sec
	Search (Event Criterion)	YES
	Event log	Up to the 10000 events (Alarm, Motion, Video Loss, Power On/Off, record on/off, remote login, HDD error)
OSD & DVR Control	GUI	16 bit True Color
	Multi Language	English, German, Japanese, Italian, Polish, Portuguese, Spanish, Traditional Chinese, Simplified Chinese, Hebrew, Turkish, Thai
	USB Mouse	Yes
	Touch Panel	Touch Panel LCD Monitor (USB interface, EET1 Chipset only)
	Remote Controller	IR Remote Control (Max. 4 Device)
	Upgrade	via USB/ Network
Others	Camera title	Multi Language
	P/T/Z Control	RS485 Interface
	Dimension(mm)	442(W) x 92(H) x 438(D)
	Weight w/o HDD/DVD	5Kg
Power	AC 110V / 220V	
Power Source	220W	

\* Specifications are subjected to change without prior notice.

# 8 CHANNEL H.264 HD STANDALONE DVR

STAND ALONE DVR



## KEY FEATURES

- H.264 Hardware Compression
- 8 Channel HD (1080P) Recording
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- HD Multiplexer
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-HD9813
Camera Input		8
Video	Output	Max:1920X1080 2 independent output:1 HDMI with Audio ,1VGA 8 x HD-SDI
	Input	(1080p@60fps, 1080p@50fps, 1080p@30fps, 1080p@25fps, 1080i@60fps, 1080i@50fps, 720p@60fps, 720p@50fps)
Audio	Input	8 HD-SDI
	Output	8 RCA (1 shared for 2-way audio) 2 RCA
Operating System		Embedded Linux OS
Internal HDD		Supports Max. x 6 SATA Devices (HDDx6, HDDx5 + eSATAx1, HDDx5 + DVD±RWx1, HDDx4 + DVD±RWx1 + eSATAx1)
External HDD		YES, eSATA
Sensor Input / Relay Output		Sensor-in x 8
Serial Interface		Relay-out x 4
USB		RS-485 (Inx1, Outx1) 1080P / 720P, 240fps
Display	Speed	1, 4, 8 SEQ.
	Split Screen	Switching time : 1 ~ 99 sec
Recording	Auto Channel Switching	Zoom ( Digital x2~ x8 ), PIP, Auto SEQ.
	Mode	H.264 High Profile
Recording	Compression	
	Dual Stream Resolution (Pixel)	Main (Recording) 1920 x 1080 , 1280 x 720 Sub (Network) 640 x 360 , 320 x 180
Recording	Picture Quality	10 ~ 100 levels for adjustment
	Mode	Normal, Manual, Event, Schedule
Recording	Speed	240 fps (1920x1080) 240 fps (1280x720)
	Pre-Alarm	1 ~ 10 sec
Recording	Post-Alarm	1 ~ 100 sec
	Watermark	Yes
Playback	Display	1, 4, 8
	Search Mode	Date/Time , Event
Playback	Zoom	Digital x2 ~ x 8
	Snapshot	YES
Playback	Speed	Play, Pause, Stop, Slow(1/2, 1/4, 1/8), FF(4, 8, 16, 32), REW(4, 8, 16, 32), Frame Step, Seek Bar
	Device	Internal HDD
Network	Network Interface	10/100/1000 Ethernet
	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP, DDNS
Network	Application	Windows XP/VISTA/7, Mac OS X
	Remote Software	License Application Software , IE Browser
Network	Account	1 Admin + 8 Users
	CMS	Yes
Network	Event Transport	Windows Phone, Blackberry, iPhone, iPad, Android
	Event Transport	E-mail
Backup	Interface	USB2.0 or SATA
	Audio Backup	YES
Backup	Network	YES
	Backup device (Option)	Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW
Alarm	Motion Detection	Sensitivity : 100 levels for each channel Area : Individually programmable
	Alarm Hold Time	1~60 sec
Alarm	Event log	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)
	GUI	32 bit True Color
OSD & DVR Control	Multi Language	Supported
	Camera Title	Multi-Language
OSD & DVR Control	USB Mouse	Yes
	Touch Panel	Touch Panel LCD Monitor (USB interface, EETI Chipset only)
OSD & DVR Control	Remote Controller	IR Remote Control
	Upgrade	via USB/ Network
OSD & DVR Control	P/T/Z Control	RS485 Interface
	Dimension(mm)	442(W) x 92(H) x 438(D)
Others	Weight w/o HDD/DVD	5Kg
	Power	AC100-240V DC12V 5A
Others	Power Source	60W

• Specifications are subjected to change without prior notice.

# 8 CHANNELS FULL D1 REALTIME LIVE / PLAYBACK



STAND ALONE DVR

## KEY FEATURES

- H.264 Hardware Compression
- High Speed up to 16CH D1(960x480) real-time recording
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-2H008	
Video	Input	8CH BNC	
	Output	Max. 1920x1080 2 independent output: 1 HDMI with Audio, 1 VGA 8 RCA(1 shared for 2-way audio)	
Audio	Input	2 RCA	
	Output	Embedded Linux OS	
Operating System		Max. 4 x SATA Devices	
Internal HDD		(HDDx3 + eSATAx1, HDDx2 + DVD±RWx1 + eSATAx1)	
External HDD		eSATA	
Sensor Input / Relay Output		Sensor-in x8 Relay-out x2	
Serial Interface		1 x RS-485 (in/out shared)	
USB		2 x USB2.0	
Display	Speed	HD 30fps, D1 240fps	
	Resolution (Pixel)	1280 x 720P / 720 x 480(NTSC), 720 x 576 (PAL)	
	Split Screen	1,4,9 SEQ.	
Auto Channel Switching Mode		Switching time: 1-99 sec. Zoom (Digital x 2-8), PIP, Auto SEQ.	
Recording	Compression		H.264 AVC
	Dual Stream	Main (Recording)	704 x 480 , 704 x 240 , 352 x 240 (NTSC)
		Sub (Network)	704 x 576 , 704 x 288 , 352 x 288 (PAL) 352x240, 176x240, 176x120 (NTSC) / 352x288, 176x288, 176x144 (PAL)
	Picture Quality Mode		10~100 levels for adjustment
	Speed	NTSC	Normal, Manual, Event, Schedule D1 real-time (704 x 480) HD1 real-time (704 x 240) CIF real-time( 352 x 240)
PAL		D1 real-time (704 x 576) HD1 real-time (704 x 288) CIF real-time (352 x 288)	
Pre-Alarm		1 ~ 10 sec	
Post-Alarm		1 ~ 100 sec	
Watermark		Yes	
Playback	Display		1, 4 , 8
	Search Mode		Date , Time , Event
	Zoom		Digital x2 ~ x8
	Snapshot		Yes
	Contrl		Play, Pause, Stop, Slow(1/2, 1/4, 1/8), FF(4, 8, 16, 32), REW(4, 8, 16, 32), Frame Step, Seek Bar
Network	Device		Internal HDD /eSATA
	Network Interface		10/100/1000 Ethernet
	Protocol		TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP
	Application		Windows XP/VISTA/7, Mac OS X
	Remote Software		License Application Software , IE Browser
	Account		1 Admin + 8 Users
Back up	CMS		Unlimited (depends on bandwidth)
	3G/ GPRS		iPhone, iPad, Android phone, Windows Phone 7
	Event Transport		E-mail
	Interface		USB2.0 or SATA
Alarm	Audio Backup		YES
	Network		YES
	Backup device (Option)		Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW
OSD & DVR control	Motion Detection		Sensitivity : 100 levels for each channel Area: Configurable detection area Up to the 10000 events
	Event log		(Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)
Others	GUI		32 bit True Color
	Multi Language		English, French, German, Greek, Japanese, Italian , Polish, Portuguese, Spanish , Traditional Chinese, Korean, Thai, Hebrew, Turkish, Russian
	USB Mouse		Yes
	Touch Panel		Touch Panel LCD Monitor (USB interface, EETI Chipset only)
	Remote Controller		IR Remote Control
Others	Upgrade		Via USB/ Network
	P/T/Z Control		RS485 Interface
	Dimension(mm)		430(W) x 55(H) x 300(D)
	Weight w/o HDD/DVD		2.6Kg
	Power		AC 100-240V DC12V 5A
Power Source		60W	

\* Specifications are subjected to change without prior notice.

# 16 CHANNELS FULL D1 REALTIME LIVE / PLAYBACK

STAND ALONE DVR



## KEY FEATURES

- H.264 Hardware Compression
- High Speed up to 16CH D1(704x480) real-time recording
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

## TECHNICAL SPECIFICATIONS

Model			SR-2H016
Video	Input		16CH BNC
	Output	Main	HDMI (1024 x 768, 1280 x 1024, 1366 x 768, 1440 x 900) + Audio
		SPOT	VGA (1024 x 768, 1280 x 1024, 1366 x 768, 1440 x 900) BNC (720 x 480 / 720 x 576 )
Audio	Input	16 RCA	
	Output	2 RCA	
Operating System			Embedded Linux OS
Internal HDD			Support Max. 6 SATA Device
External HDD			(HDDx4 + eSATAx1, HDDx4 + DVDx1, HDDx4 + DVDx1 + eSATAx1)
Sensor Input / Relay Output			eSATA
			Sensor-in x16
			Relay-out x 16
Serial Interface			RS-485
USB			2 x USB2.0 for Backup, Mouse Connectivity, 3G USB modem, Firmware upgrade
Display	Speed		480 fps
	Resolution (Pixel)		720 x 480(NTSC) / 720 x 576(PAL)
	Split Screen		1, 4, 9, 13, 16, SEQ.
	Auto Channel Switching Mode		Switching time: 1 ~ 99 sec
Recording	Compression		Zoom (Digital x 2 ~ x 8), PIP, Auto SEQ.
	Dual Stream Resolution (pixel)	Main (recording)	H.264 ASP (Internet Transmission: H.264)
		Sub (network)	704 x 480, 704 x 240, 352 x 240 (NTSC) 704 x 576, 704 x 288, 352 x 288 (PAL)
	Picture Quality		176 x 240 (NTSC) / 176 x 288 (PAL)
	Mode		10~100 levels for adjustment
	Priority		Continuous, Motion, Alarm, Schedule
	Speed		Manual -> Alarm, Motion -> Schedule
Pre-Alarm		480 fps (NTSC) / 400 fps (PAL)	
Post-Alarm		1 ~ 10 sec	
Watermark		1 ~ 100 sec	
Playback	Display		Yes
	Search Mode		1, 4, 8, 16
	Zoom		Date, Time, Event (motion, alarm) camera
	Snapshot		Digital x2 ~ x8
	Speed		Yes
Network	Device		Play, Stop, Slow(1/2, 1/4, 1/8), Seek, Normal, REW & FF, Frame to frame, Pause
	Network Interface		Internal HDD
	Protocol		10/100 Ethernet, 3G modules
	Application		TCP/IP, SMTP, HTTP, DHCP, PPPOE(ADSL), NTP
	Remote Software		Windows XP/VISTA / 7 (PC Client System)
	Account		License Application Software, IE Browser
	CMS		1 Admin + 8 Users
	3G/ GPRS		Unlimited (depends on bandwidth)
	Event Transport		iPhone, iPad, Android phone, Windows Phone 7
	Interface		E-mail
Backup	Audio Backup		USB2.0 or SATA
	Network		YES
	Backup device (Option)		YES
Alarm	Motion Detection		Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW
	Alarm Hold Time		Detect Frames : Unlimited / channel
	Search (Event Criterion)		Sensitivity : 100 levels for each channel
	Event log		Area: Programmable motion detection area for each camera individually
OSD & DVR Control	GUI		1~60 sec
	Multi Language		YES
	USB Mouse		Up to the 10000 events
	Touch Panel		(Alarm, Motion, Video Loss, Power On/Off, record on/off, remote login, HDD error
	Remote Controller		16 bit True Color
	Upgrade		English, French, German, Greek, Japanese, Italian, Polish, Portuguese, Spanish, Traditional Chinese, Korean, Thai, Hebrew, Turkish, Russian
	Camera title		Yes
P/T/Z Control		Touch Panel LCD Monitor (USB interface, EETI Chipset only)	
Others	Dimension(mm)		IR Remote Control (Max. 4 Device)
	Weight w/o HDD/DVD		Via USB/ Network
	Power		32 characters
	Power Source		RS485 Interface
			442(W) x 92(H) x 438(D)
			5Kg
			AC 110V/240V
			220W

\* Specifications are subjected to change without prior notice.

# 32 CHANNEL H.264 D1 STANDALONE DVR



STAND ALONE DVR

## KEY FEATURES

- H.264 Hardware Compression
- High Speed up to 32CH Half D1(704x240) real-time recording
- Triple streaming for Live display, Recording and playback
- High Definition Picture Quality
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC System
- Support 3G Mobile System
- Support MAC

## TECHNICAL SPECIFICATIONS

Model			SR-2H032
Video	Input		32CH BNC
	Output	Main	HDMI (1024x768, 1280x1024, 1366x768, 1440x900) + Audio
		SPOT	VGA (1024x768, 1280x1024, 1366x768, 1440x900) BNC(720x480 / 720x576 )
Audio	Input	16 RCA	
	Output	2 RCA	
Operating System			Embedded Linux OS
Internal HDD			Support Max. 6 SATA Device
External HDD			(HDDx4, HDDx4 + eSATAx1, HDDx4 + DVDx1, HDDx4 + DVDx1 + eSATAx1)
Sensor Input / Relay Output			eSATA
			Sensor-in x16
			Relay-out x 4
Serial Interface			RS-485
USB			2 x USB2.0 for Backup, Mouse Connectivity, 3G USB modem, Firmware upgrade
Display	Speed		960 fps
	Resolution (Pixel)		720 x 480(NTSC) / 720 x 576(PAL)
	Split Screen		1, 4, 9, 16, 32, SEQ.
	Auto Channel Switching		Switching time : 1 ~ 99 sec
	Mode		Zoom (Digital x 2 ~ x 8) , PIP , Auto SEQ.
Recording	Compression		H.264 ASP (Internet Transmission: H.264)
	Dual Stream Resolution (pixel)	Main (recording)	704 x 480 , 704 x 240 , 352 x 240 (NTSC)
		Sub (network)	704 x 576 , 704 x 288 , 352 x 288 (PAL)
	Picture Quality		176 x 240 (NTSC) / 176 x 288 (PAL)
	Mode		10~100 levels for adjustment
	Priority		Continuous, Motion, Alarm, Schedule
	PAL		Manual -> Alarm, Motion -> Schedule
	Pre-Alarm		D1 400fps(704x576) , HD1 800fps(704x288) , CIF 800fps(352x288)
	Post-Alarm		1 ~ 10 sec
	Watermark		1 ~ 100 sec
Playback	Display		Yes
	Search Mode		1, 4, 8, 16, 32
	Zoom		Date, Time, Event (motion, alarm) camera
	Snapshot		Digital x2 ~ x8
	Speed		Yes
Network	Device		Play, Stop, Slow(1/2, 1/4, 1/8), Seek, Normal, REW & FF, Frame to frame, Pause
	Network Interface		Internal HDD
	Protocol		10/100 Ethernet, 3G
	Application		TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP
	Remote Software		Windows XP/VISTA / 7, MAC OS X (PC Client System)
	Account		License Application Software, IE Browser
	CMS		1 Admin + 8 Users
Backup	3G/ GPRS		Unlimited (depends on bandwidth)
	Event Transport		iPhone, iPad, Android phone, Windows Phone 7
	Interface		E-mail
	Audio Backup		USB2.0 or SATA
Alarm	Network		YES
	Backup device (Option)		YES
	Motion Detection		Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW
	Alarm Hold Time		Detect Frames : Unlimited / channel
	Search (Event Criterion)		Sensitivity : 100 levels for each channel
OSD & DVR Control	Event log		Area: Programmable motion detection area for each camera individually
	GUI		1~60 sec
	Multi Language		YES
	USB Mouse		Up to the 10000 events
	Touch Panel		(Alarm, Motion, Video Loss, Power On/Off, record on/off, remote login, HDD error
	Remote Controller		16 bit True Color
	Upgrade		English, French, German, Greek, Japanese, Italian, Polish, Portuguese, Spanish, Traditional Chinese, Korean, Thai, Hebrew, Turkish, Russian
Others	Camera title		Yes
	P/T/Z Control		Touch Panel LCD Monitor (USB interface, EETI Chipset only)
	Dimension(mm)		IR Remote Control (Max. 4 Device)
	Weight w/o HDD/DVD		Via USB/ Network
Power		32 Character	
Power Source		RS485 Interface	
			442(W) x 92(H) x 438(D)
			5Kg
			AC 110V/240V
			220W

\* Specifications are subjected to change without prior notice.

# 4CH / 8CH / 16CH H.264 STANDALONE DVR

STAND ALONE DVR



## KEY FEATURES

- 4 / 8 / 16 channels Full D1 720x480 Display
- HDMI Output,DVD (option)
- Full D1 recording and playback
- H.264 Hardware Compression
- Digital zoom× 8
- On Board VGA
- With free bundled CMS
- 3GPP, PDA, Smart phone Blackberry, HTC, iPhone support
- 2 USB port
- RS485 support
- Audio Input & output
- Digital Watermarking : Video Time and Date Stamped for Official Use
- Support MAC

## REAR PANEL



SR-H2004-N



SR-H2008-N



SR-H2016-N

## TECHNICAL SPECIFICATIONS

Model	SR-H2004-N	SR-H2008-N	SR-H2016-N	
Video System	NTSC / PAL auto			
HDMI Output	Option			
Video Output	1 VGA (1280x1024) + 1 BNC for Main Monitor or SPOT Monitor.			
Audio Input	4 RCA in		16 RCA in	
Audio Output	2 RCA out		2 RCA out	
Serial Communication	RS485			
Sensor In / Relay Out	4 in / 1 out	8 in / 1 out	16 in / 1 out	
USB	2 x USB 2.0			
DVD Writer	Option			
Internal Device	Max. 2 SATA Devices (HDD x 2, or HDDx1 + DVDx1, or HDDx1 + E-SATAx1)		Max. 4 SATA Devices (HDD x 3 + E-SATA x 1 or HDD x 2 + DVD x 1 + E-SATA x 1)	
External Device	Support HDD Array by e-SATA (Option)			
Operating System	Embedded Linux OS			
Display	Speed	120 fps	240 fps	480fps
	Resolution (Pixel)	720 x 480 (NTSC), 720 x 576 (PAL)		
	Split Screen	1, 4, SEQ.		1,4,9,13,16 SEQ.
	Mode	Zoom (Digital x2 ~ x8), PIP, Auto SEQ.		
Auto Channel Switching	Switching time: 1~999 sec			
Compression	H.264 ASP (Internet Transmission: H.264)			
Recording	Dual Stream Resolution (pixel)	704 x 480, 704 x 240, 352 x 240 (NTSC) / 704 x 576, 704 x 288, 352 x 288 (PAL)		
	Picture Quality Mode	352 x 240 (NTSC), 352 x 288 (PAL)		
		5 steps (Highest, High, Normal, Basic, Below Basic)		
Priority	Manual, Motion, Alarm, Schedule			
Speed	NTSC	120 fps (704 x 480)	120 fps (704 x 480)	120 fps (704 x 480)
		120 fps (704 x 240)	240 fps (704 x 240)	240 fps (704 x 240)
	PAL	120 fps (352 x 240)	240 fps (352 x 240)	480 fps (352 x 240)
		100 fps (704 x 576)	100 fps (704 x 576)	100 fps (704 x 576)
100 fps (704 x 288)	200 fps (704 x 288)	200 fps (704 x 288)		
100 fps (352 x 288)	200 fps (352 x 288)	400 fps (352 x 288)		
Pre-Alarm	10 seconds			
Post-Alarm	1~60 sec			
Water Marking	Yes			
Playback	Display	1, 4	1, 4, 8	1, 4, 8, 16
	Speed	Real time @ D1		
	Search Mode	Date, Time, Event (motion, alarm) camera		
	Zoom	Digital x2 ~ x8		
Speed	Normal, REW & FF (Speed x 2, x4, x8, x16, x32, x64) Frame to frame, Pause			
Network Interface	10/100 Ethernet			
Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPOE(ADSL), NTP, DDNS			
Account	1 Admin + 4 Users			
Application	Windows XP/VISTA / 7 (PC Client System)			
Remote Software	License Application Software, IE Browser			
CMS	Unlimited (Depends on bandwidth)			
3G/ GPRS	Symbian, Windows Mobile, Blackberry, iPhone, Android phone			
Event Transport	E-mail			
Interface	USB2.0			
Audio Backup	YES			
Backup device	Network Backup / USB Flash Drive / USB DVD±RW			
Alarm	Motion Detection	Each control / channel Sensitivity : 10 steps for each channel Area: Programmable motion detection area for each camera individually		
	Alarm Hold Time	1~60 sec		
	Event log	Up to the 1000 events (Alarm, Motion, Video Loss, Power On/Off, record on/off, remote login, HDD error)		
	Search (Event Criterion)	Yes		
Multi Language	English, Japanese, German, French, Spanish, Portuguese, Italian, Russian, Greek, Korean, Polish, Hungarian, Hebrew, Thai, Persian, Dutch, Turkish, Arabic, Vietnam, Swedish, Finnish, Ukrainian, Bulgarian, Romania, Indonesia			
USB Mouse	YES			
Touch Panel	Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)			
Remote Controller	IR Remote Control (Max. 1 Device)		IR Remote Control (Max. 4 Device)	
Upgrade	via USB/ Network			
Camera title	14 Character			
Pan/Tilt Camera	Control From RS485 Interface (Pelco P, Pelco D, Samsung, LG, Lilin)			
Dimension ( mm )	430 x 55 x 300mm (WxHxD)			
Power	36W	36W	DC12V, 5A, 60W	
Weight ( w/o HDD/DVD±RW )	2.6Kg			

\* Specifications are subjected to change without prior notice.



# SR-2H016-960H

## 16 CHANNELS WD1 DVR



STAND ALONE DVR

### KEY FEATURES

- H.264 Hardware Compression
- High Speed up to 16CH D1(960x480) real-time recording
- Real-Time Triple streaming for Live display and playback
- High Definition Picture Quality
- Auto Switching for 4:3 or 16:9 screen aspect ratio
- User Friendly GUI
- Support 3GPP, smart phones, iPhone and Android phone
- With USB port for back up
- CMS support
- Support MAC

### TECHNICAL SPECIFICATIONS

Model		SR-2H016-960H	
Video	Output	Max. 1920x1080 2 independent output: 1 HDMI with Audio, 1 VGA	
	Input	16 BNC	
Audio	Input	16 RCA (1 shared for 2-way audio)	
	Output	2 RCA	
Operating System		Embedded Linux OS	
Internal HDD		Max. 4 x SATA Devices	
External HDD		(HDDx3 + eSATAx1, HDDx2 + DVDx1 + eSATAx1) eSATA	
Sensor Input / Relay Output		Sensor-in x16 Relay-out x 2	
Serial Interface		1 x RS-485 (in/out shared)	
USB		2 x USB2.0	
Display	Speed	WD1 480 fps (NTSC) / 400 fps (PAL)	
	Resolution (Pixel)	960x480(NTSC), 960x576(PAL)	
	Split Screen	1, 4, 9, 13, 16, SEQ.	
	Auto Channel Switching	Switching time : 1 ~ 99 sec	
Recording	Mode	Zoom (Digital x 2 ~ x 8) , PIP , Auto SEQ.	
	Compression	H.264 High Profile	
	Dual Stream Resolution (pixel)	Main (Recording)	960x480, 960x240, 480x240 (NTSC) / 960x576, 960x288, 480x288 (PAL)
		Sub (Network)	480x240, 176x240, 176x120 (NTSC) / 480x288, 176x288, 176x144 (PAL)
	Picture Quality	10~100 levels for adjustment	
	Mode	Normal, Manual, Event, Schedule	
	Speed (NTSC/PAL)	D1 real-time(960 x 480)	
		HD1 real-time(960 x 240)	
		CIF real-time(480 x 240)	
		D1 real-time(960 x 576)	
Playback	D1 real-time(960 x 288)		
	CIF real-time(480 x 288)		
	Pre-Alarm	1 ~ 10 sec	
	Post-Alarm	1 ~ 100 sec	
Network	Watermark	Yes	
	Display	1, 4, 8, 16	
	Search Mode	Date, Time, Event	
	Zoom	Digital x2 ~ x8	
	Snapshot	Yes	
	Speed	Play, Pause, Stop, Slow(1/2, 1/4, 1/8), FF(4, 8, 16, 32), REW(4, 8, 16, 32), Frame Step, Seek Bar	
	Device	Internal HDD	
	Network Interface	10/100/1000 Ethernet	
Backup	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP, DDNS	
	Application	Windows XP/VISTA/7, Mac OS X	
	Remote Software	License Application Software, IE Browser	
	Account	1 Admin + 8 Users	
	CMS	Unlimited (depends on bandwidth)	
	3G/ GPRS	iPhone, iPad, Android phone, Windows Phone 7	
	Event Transport	E-mail	
Alarm	Interface	USB2.0 or SATA	
	Audio Backup	YES	
	Network	YES	
OSD&DVR Control	Backup device (Option)	Network Back up / USB flash drive / USB DVD-RW / SATA DVD-RW	
	Motion Detection	Sensitivity : 100 levels for each channel Area : Configurable detection area	
Others	Event log	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)	
	GUI	32 bit True Color	
	Multi Language	English, French, German, Greek, Japanese, Italian, Polish, Portuguese, Spanish, Traditional Chinese, Korean, Thai, Hebrew, Turkish, Russian	
	USB Mouse	Yes	
Power	Touch Panel	Touch Panel LCD Monitor (USB interface, EETI Chipset only)	
	Remote Controller	IR Remote Control (Max. 4 Device)	
	Upgrade	Via USB/ Network	
	P/T/Z Control	RS485 Interface	
Power Source	Dimension(mm)	430(W) x 55(H) x 300(D)	
	Weight w/o HDD/DVD	2.6Kg	
	Power	AC100-240V DC12V 5A	
	Power Source	60W	

\* Specifications are subjected to change without prior notice.

# 4 CH / 8 CH / 16 CH H.264 DVR

STAND ALONE DVR



## KEY FEATURES

- H.264 Hardware Compression
- With free bundled CMS
- 3GPP, Smart phone Blackberry, HTC, iPhone support
- 2 USB port
- 4 Alarm in, 1 Alarm Out
- RS485 Serial Communication
- Support MAC

## REAR PANEL



## TECHNICAL SPECIFICATIONS

Model		SR-3004WS	SR-3008WS	SR-3016WS	
Camera Input		4CH	8 CH	16 CH	
Video Output		2 BNC (1 BNC for Main monitor, 1 BNC for co-monitor) 1 VGA (max.1280X1024)			
Video Input		4CH	8CH	16CH	
HDMI		N/A			
Audio	Input	4 RCA	4 RCA	4 RCA	
	Output	2 RCA	2 RCA	1 RCA	
System	Operating System	Embedded Linux OS			
	Internal HDD	Supports 1 SATA Device (HDDx1)			
	External HDD	N/A	N/A	eSATA	
	Sensor In (NO, NC) Relay out	Sensor-in x 4 Relay-out x 1	Sensor-in x 4 Relay-out x 1	Sensor-in x 8 Relay-out x 1	
Serial Interface		RS-485			
USB		2 x USB2.0			
Display	Speed	120 fps	240 fps	480 fps	
	Resolution (Pixel)	720 x 480 (NTSC), 720 x 576 (PAL)			
	Split screen	1, 4, SEQ.	1, 4, 8, SEQ.	1, 4, 9, 13, 16, SEQ.	
	Auto Channel Switching Mode	Switching time: 1 ~ 999 sec			
Compression		Zoom ( Digital x2~ x8 ), PIP, Auto SEQ. H.264 ASP (Internet Transmission: H.264)			
Recording	Dual Stream Resolution (Pixel)	Main (Recording)	704 x 480, 704 x 240, 352 x 240 (NTSC) / 704 x 576, 704 x 288, 352 x 288 (PAL)	704 x 480, 704 x 240, 352 x 240 (NTSC) / 704 x 576, 704 x 288, 352 x 288 (PAL)	704 x 480, 704 x 240, 352 x 240 (NTSC) / 704 x 576, 704 x 288, 352 x 288 (PAL)
		Sub (Network)	352 x 240 (NTSC) 352 x 288 (PAL)	352 x 240 (NTSC) 352 x 288 (PAL)	352 x 240 (NTSC) 352 x 288 (PAL)
	Picture quality Mode	5 levels (Highest, High, Normal, Basic, Below Basic)			
	Speed	NTSC	D1 120 fps (704 x 480) / HD1 120 fps (704 x 240) / CIF 120 fps (352 x 240)		
Pre-Alarm		D1 100 fps (704 x 576) / HD1 100 fps (704 x 288) / CIF 100 fps (352 x 288)			
Post-Alarm		10 SEC			
Watermark		1 ~ 60 SEC			
Display		Yes			
Playback	Search mode	1, 4	1, 4, 8	1, 4, 9, 16	
	Zoom	Date, time, event, camera Digital ( x2 ~ x8 )			
	Snapshot	Yes			
	Speed	Normal, REW & FF (recorded speed x2, x4, x8, x16, x32, x64), Frame to frame, Pause			
Device		Int. HDD			
Network	Network Interface	10/100 Ethernet			
	Protocol	TCP/IP, SMTP, HTTP, DHCP, PPPoE(ADSL), NTP			
	Application	Windows XP/VISTA/7(PC Client system)			
	Remote Software	Application Software, IE Browser			
Account		1 Admin + 10 Users			
CMS		Yes			
Mobile		Symbian, Windows Mobile, Blackberry, iPhone, Android phone			
Event Transport		E-mail, FTP			
Backup	Interface	USB 2.0 or SATA			
	Audio Backup	Yes			
	Network	Yes			
Backup Device (Optional)		Network Backup / USB Flash Drive / USB DVD±RW			
Alarm	Motion Detection	Detected Frames: Channel Sensitivity : 10 levels for each channel Area : Programmable individually			
	Search ( Event Criterion )	Yes			
	Event Log	Up to the 10000 events (Sensor, Motion, video Loss, power on, remote login, logout, HDD error, HDD full)			
OSD & DVR Control	GUI	16-bit True Color			
	Multi-Language	English, Traditional Chinese, Others			
	Camera Title	Multi-Language			
	USB Mouse	Yes			
	Touch Panel	Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)			
	Remote Controller	IR Remote Control (Max. 1 Device)			
System Upgrade		via USB / Network			
Hard Key		Front Panel			
Pan/Tilt/Zoom Control		Control From RS-485 Interface (Pelco P, Pelco D, Samsung, LG, LiLin)			
Adaptor		Input 100~240V Output 12V 3A			
Power Source		36W			
Dimension		W: 280(W) x 51(H) x 203(D)	W: 280(W) x 51(H) x 203(D)	W: 280(W) x 51(H) x 203(D)	
Weight ( w/o HDD/DVD±RW )		1.00 Kg	1.03 Kgs	1.04 Kgs	

\* Specifications are subjected to change without prior notice.

# 4CH / 8CH H.264 STANDALONE DVR



STAND ALONE DVR

## KEY FEATURES

- 4 / 8 channels Full D1 720x480 Display
- Full D1 recording and playback
- H.264 Hardware Compression
- Digital zoom x 8
- On Board VGA
- With free bundled CMS
- 3GPP, PDA, Smart phone Blackberry, HTC, iPhone support
- 2 USB port
- RS485 support
- 1 Audio Input & output
- Support MAC

## TECHNICAL SPECIFICATIONS

Model		SR-LD304	SR-LD308	
Video System		NTSC / PAL auto		
Video Output		1 VGA (1280x1024) + 1 BNC for Main Monitor or SPOT Monitor.		
Audio Input		1 Audio input / 1 Audio output		
Serial Communication		RS485		
USB		2 x USB 2.0		
Internal HDD		Supports 1 SATA Device		
Operating System		Embedded Linux OS		
Display	Speed	120 fps	240 fps	
	Resolution (Pixel)	720 x 480 (NTSC), 720 x 576 (PAL)		
	Split Screen	1, 4, SEQ.	1, 4, 6, 8 SEQ.	
	Mode	Zoom (Digital x2 ~ x8), PIP, Auto SEQ.		
	Auto Channel Switching	Switching time: 1~999 sec		
Compression		H.264 ASP (Internet Transmission: H.264)		
Dual Stream Resolution (pixel)	Main (recording)	704 x 480, 704 x 240, 352 x 240 (NTSC) / 704 x 576, 704 x 288, 352 x 288 (PAL)		
	Sub (network)	352 x 240 (NTSC), 352 x 288 (PAL)		
Picture Quality		5 steps (Highest, High, Normal, Basic, Below Basic)		
Mode		Manual, Motion, Alarm, Schedule		
Priority		Manual, Alarm, Motion, Schedule		
Recording	Speed	NTSC	120 fps (704 x 480) 120 fps (704 x 240) 120 fps (352 x 240)	
		PAL	100 fps (704 x 576) 100 fps (704 x 288) 100 fps (352 x 288)	
	Pre-Alarm		10 seconds	
	Post-Alarm		1~60 sec	
Water Marking		Yes		
Playback	Display	1, 4	1, 4, 8	
	Speed	Real time @ D1		
	Search Mode	Date, Time, Event (motion, alarm) camera		
	Zoom	Digital x2 ~ x8		
	Speed	Normal, REW & FF (Speed x 2, x4, x8, x16, x32, x64) Frame to frame, Pause		
Device		Internal HDD		
Network Interface		10/100 Ethernet		
Protocol		TCP/IP, SMTP, HTTP, DHCP, PPPOE(ADSL), NTP, DDNS		
Account		1 Admin + 4 Users		
Application		Windows XP/VISTA / 7 (PC Client System)		
Remote Software		License Application Software, IE Browser		
CMS		Unlimited (Depends on bandwidth)		
3G/ GPRS		Symbian, Windows Mobile, Blackberry, iPhone, Android phone		
Event Transport		E-mail		
Interface		USB2.0		
Audio Backup		YES		
Backup device		Network Backup / USB Flash Drive / USB DVD±RW		
Motion Detection		Each control / channel Sensitivity : 10 steps for each channel Area: Programmable motion detection area for each camera individually		
Alarm Hold Time		1~60 sec		
Event log		Up to the 1000 events		
Search (Event Criterion)		(Alarm, Motion, Video Loss, Power On/Off, record on/off, remote login, HDD error)		
GUI		YES		
Multi Language		32 bit True Color English, Japanese, German, French, Spanish, Portuguese, Italian, Russian, Greek, Korean, Polish, Hungarian, Hebrew, Thai, Persian, Dutch, Turkish, Arabic, Vietnam, Swedish, Finnish, Ukrainian, Bulgarian, Romania, Indonesia		
USB Mouse		YES		
Touch Panel		Touch Panel LCD Monitor (USB Interface, EETI Chipset Only)		
Remote Controller		IR Remote Control (Max. 1 Device)		
Upgrade		via USB/ Network		
Camera title		14 Character		
Pan/Tilt Camera		Control From RS485 Interface (Pelco P, Pelco D, Samsung, LG, Lilin)		
Dimension ( mm )		225(W)x46(H)x215(D)	225(W)x46(H)x215(D)	
Power		DC12V, 3A, 36W		
Weight ( w/o HDD/DVD±RW )		0.77Kg	0.82Kg	

\* Specifications are subjected to change without prior notice.

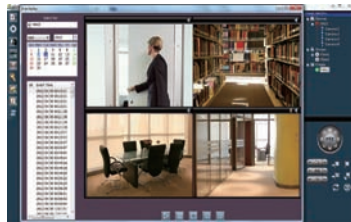
## REAR PANEL



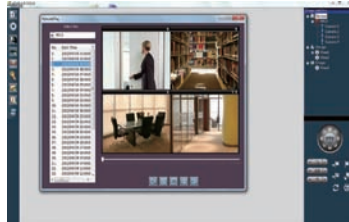
SR-LD304



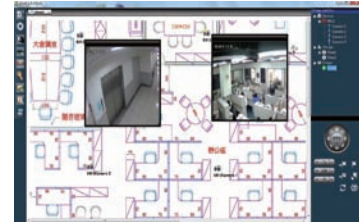
SR-LD308



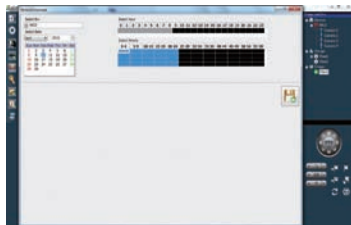
Event Playback



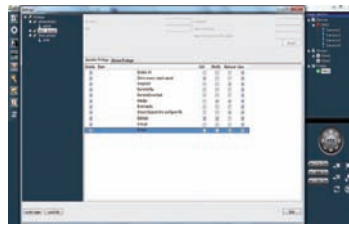
Remote Play



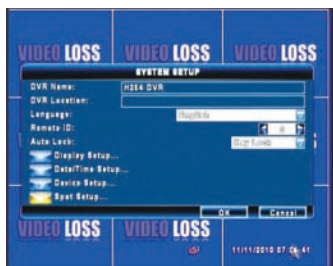
E-MAP



Remote Download



User Management



System Set Up



Network Set Up



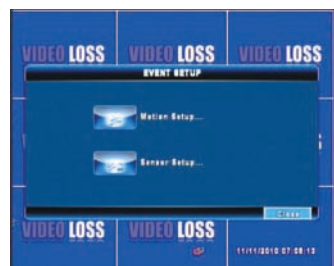
MENU



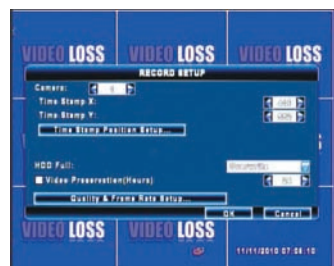
PTZ & RS-485 Set Up



Utility Set Up



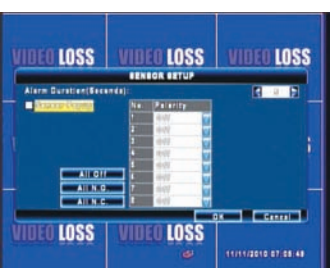
EVENT Set Up



Record Set Up



Motion Set Up



Sensor Set Up



Schedule Setup

# CAMERA ENCLOSURES



## TECHNICAL SPECIFICATIONS

Model	CH-905L
Purpose	Outdoor
Accessory	Blower & Heater (option)
Construction	Aluminum
Input Voltage	DC12V, AC24V, 110VAC, 220VAC
Dimension	390mm(L) x 105mm(W) x 115mm(H)
Weight	1.22Kgs

Model	CH-917
Purpose	Outdoor
Accessory	Blower & Heater (option)
Input Voltage	DC12V, AC24V, 110VAC, 220VAC
Construction	Aluminum
Dimension	313mm(L) x 140mm(W) x 115mm(H)
Weight	1.4Kgs



Model	CH-912L , CH-912M
Purpose	Outdoor
Accessory	Blower & Heater & Wiper (option)
Construction	Aluminum
Input Voltage	DC12V, AC24V, 110VAC, 220VAC
Dimension	CH-912L: 470mm(L) x 142mm(W) x 135mm(H) CH-912M: 40mm(L) x 110mm(W) x 111.5mm(H)
Weight	CH-912L 2.7Kgs , CH-912M 1.9Kgs

Model	CH-920
Type	Side Open
Purpose	Outdoor
Accessory	Blower & Heater (option)
Construction	Aluminum
Input Voltage	DC12V, AC24V, 110VAC, 220VAC
Dimension	125mm(L) x 126mm(W) x 370mm(H)
Weight	1.25Kgs



Model	CH-921
Type	Side Open
Purpose	Outdoor
Accessory	Blower & Heater (option)
Construction	Aluminum
Input Voltage	DC12V, AC24V, 110VAC, 220VAC
Dimension	140mm(L) x 112mm(W) x 400mm(H)
Weight	1.6Kgs

\* Specifications are subjected to change without prior notice.

# CAMERA ENCLOSURES



## TECHNICAL SPECIFICATIONS

Model	MB-805
Dimension	285(H)X93(W)mm
Weight	0.8 kgs



Model	MB-806S	MB-806	MB-807S
MAX. Load Capacity	4 Kgs		
Construction	ABS Plastic		
Color	Black or Beige		
Dimension	120.5mm	160mm	180mm
Weight	0.2Kgs	0.25Kgs	

Model	MB-808
MAX. Load Capacity	4 Kgs
Construction	ABS Plastic
Color	Beige
Dimension	170mm
Weight	0.2Kgs



Model	MB-811	MB-811H	MB-814
MAX. Load Capacity	10 Kgs		
Construction	Iron	Aluminum	Aluminum
Dimension	290mm	294mm	226mm
Weight	0.75Kgs	0.75Kgs	0.45Kgs

Model	MB-818L
MAX. Load Capacity	5 Kgs
Construction	Aluminum
Dimension	279.4mm
Weight	0.6Kgs



Model	MB-812	MB-813	MB-820
MAX. Load Capacity	3Kgs	5 Kgs	10 Kgs
Construction	Aluminum		
Dimension	--	--	214mm
Weight	0.2Kgs	0.3Kgs	0.45Kgs

Model	MB-215
Type	L type housing Bracket
Max. Load	10 kg
Material / Color	Matel / Beige
Dimension	350(H) x 180(W)mm
Swivel Angle	360°
Tilt Angle	90°
Packing	10 pcs in one carton
N.W. G.W	12kgs, 13kgs

• Specifications are subjected to change without prior notice.