

HANSE SURVEILLANCE SOLUTIONS

2019

PTZ/Zoom Box/Global Shutter Solution Catalogue

IP PTZ Camera
AHD PTZ Camera
IP/HD-SDI Zoom Box Camera
Global Shutter Camera



IP PTZ CAMERA



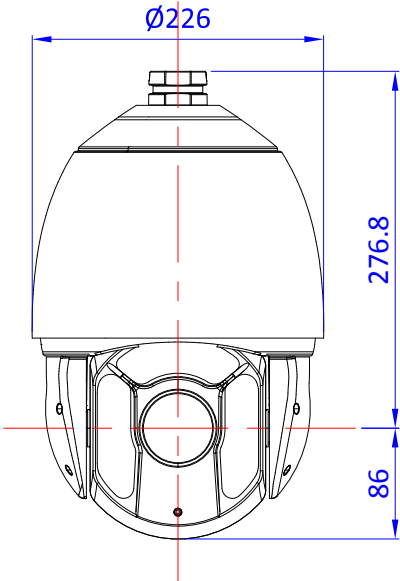
Specification

Model	HIP-AZ236IRWLH	HIP-AZ230IRWLH	HIP-AZ230IRWH	HIP-AZ220IRWH
Camera				
Image Sensor	1/1.9" Sony CMOS Sensor		1/3" Panasonic CMOS Sensor	
Total Pixel	2,120K Pixels			
Zoom	Optical x36, Digital x32	Optical x30, Digital x32	Optical x30, Digital x32	Optical x20, Digital x32
Video Signal-to-Noise	More than 50 dB			
Focal Length	F1.5 ~ F4.8, f=6mm ~ 216mm	F1.5 ~ F4.3, f=6mm ~ 180mm	F1.6 ~ F4.7, f=4.3mm ~ 129mm	F1.5 ~ F3.5, f=5.2mm ~ 104mm
Angle of View	H : 56.5°(Wide) ~ 2.12°(Tele), V : 33.63°(Wide) ~ 1.19°(Tele)	H : 61.2°(Wide) ~ 2.32°(Tele), V : 35.7°(Wide) ~ 1.31°(Tele)	H : 58.9°(Wide) ~ 2.11°(Tele), V : 45.3°(Wide) ~ 1.61°(Tele)	H : 56.4°(Wide) ~ 3.1°(Tele), V : 33.5°(Wide) ~ 1.7°(Tele)
MIN. Illuminance	DSS Off : 0.15 Lux @ Color, 0.01 Lux @ B/W DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W		DSS Off : 0.5 Lux @ Color, 0.1 Lux @ B/W DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W	
Day & Night	Auto / Day / Night(ICR)			
Focus	Auto / Manual			
AE Mode	Auto / Iris / Shutter / Manual / Bright			
White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)			
BLC	On / Off			
WDR	On / Off			
DE-FOG	On / Off			
Aperture	Adjustable			
Noise Reduction	Yes			
Image Stabilization	On / Off			
Privacy Mask	8 Masks, Spherical Coordinate			
Pan/Tilt Range	Pan : 360°(Endless) / Tilt : -10°~90° Preset : 240°/SEC.			
Pan/Tilt Speed	Manual : 0.1°~240°/SEC.(Proportional to Zoom) Swing : 1°~90°/SEC.			
Preset	255 Presets			
Pattern	4 Patterns [768 Commands(Approximate 5 Minutes)/Pattern]			
Auto Pan	1 Auto Pan			
Group	8 Groups (MAX. 16 Actions with The Combination of Preset)			
Other Functions	Auto Flip, Auto Parking, Power-up Action and Others			
Extra Video Output	CVBS 1Vp-p(NTSC or PAL)			
Communication	RS-485			
Protocol	Pelco-D			
OSD	English			
Sensor Input	2 Inputs, Photo-Coupler Type			
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A			
Audio I/O	Mono Jack, Line In/Out			
Network Interface	Ethernet 10/100 Base-T (RJ-45)			
Memory Slot	Micro SD			
IR LED Wave Length	850nm			
IR LED Distance	350m			
IR LED Brightness	Auto(Proportional to Zoom) / Manual(Off~127)			
Illumination Sensor	CDS Sensor			
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F			
Dimension	226(Ø) x 362.8(H) [mm] / 8.9(Ø) x 14.3(H) [""] / Without a Bracket			
Weight	7 kg / 15.5 lb / Without a Bracket			
Input Power	DC 12V, 3.5A			
Network				
System OS	Embedded Linux			
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS			
ONVIF	Support			
DDNS	Support			
Simultaneous User Access	MAX. 10 Users			
Video Compression Format	H.265, H.264, M-JPEG			
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240			
Video Frame Rate	MAX. 30FPS @ All Resolutions			
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control			
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP			
Audio Compression Format	G.711 u-Law			
Audio Streaming	Two Way			
Web Browser OS	Windows 7, 8, 10			
Web Browser Manager	IE11, Firefox, Safari, Opera			
Web Browser Viewer	IE11 or Higher (Active-X)			
# Specification & Design are subject to change without prior notice.				

Overview

- 2MP, 1/1.9" **Ultra Low Light** HD IP IR PTZ Camera
- 1/1.9" Sony CMOS Sensor
- Optical x36, x30 & Digital x32
- DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W
- Day & Night / DE-FOG / Image Stabilization
- 8 Masks with Spherical Coordinate
- The Shortest Path with Vector Drive Technology
- Micro Control(0.1°/SEC.) with Micro Stepping Control Technology
- 255 Presets / 4 Patterns / 1 Auto Pan / 8 Groups
- Simultaneous CVBS Output
- RS-485 for Easy PTZ Control
- 2 Sensor Inputs & 1 Alarm Output
- Intelligent IR LED Control
- IR LED Distance 350m
- Triple Streaming : H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio
- **HVE(Hardware Video Enhancer)**

Dimension





Ultra Performance **FPGA-based** **HVE** (Hardware Video Enhancer)

1) Night Vision Enhancement



OFF



ON

2) De-Fog Enhancement



OFF



ON

Ultra Performance H.265 HD IP IR PTZ Camera



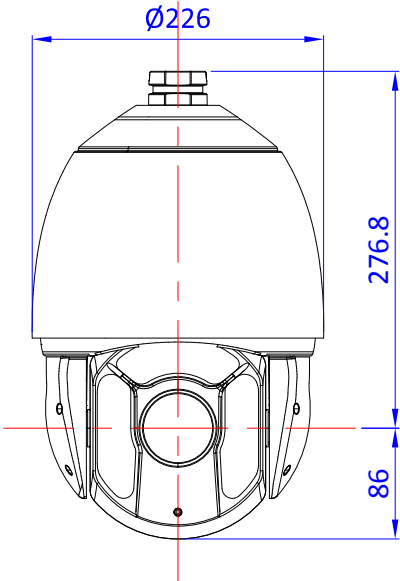
Specification

Model	HIP-AZ236IRWL	HIP-AZ230IRWL	HIP-AZ230IRW	HIP-AZ220IRW
Camera				
Image Sensor	1/1.9" Sony CMOS Sensor		1/3" Panasonic CMOS Sensor	
Total Pixel	2,120K Pixels			
Zoom	Optical x36, Digital x32	Optical x30, Digital x32	Optical x30, Digital x32	Optical x20, Digital x32
Video Signal-to-Noise	More than 50 dB			
Focal Length	F1.5 ~ F4.8, f=6mm ~ 216mm	F1.5 ~ F4.3, f=6mm ~ 180mm	F1.6 ~ F4.7, f=4.3mm ~ 129mm	F1.5 ~ F3.5, f=5.2mm ~ 104mm
Angle of View	H : 56.5°(Wide) ~ 2.12°(Tele), V : 33.63°(Wide) ~ 1.19°(Tele)	H : 61.2°(Wide) ~ 2.32°(Tele), V : 35.7°(Wide) ~ 1.31°(Tele)	H : 58.9°(Wide) ~ 2.11°(Tele), V : 45.3°(Wide) ~ 1.61°(Tele)	H : 56.4°(Wide) ~ 3.1°(Tele), V : 33.5°(Wide) ~ 1.7°(Tele)
MIN. Illuminance	DSS Off : 0.15 Lux @ Color, 0.01 Lux @ B/W DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W		DSS Off : 0.5 Lux @ Color, 0.1 Lux @ B/W DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W	
Day & Night	Auto / Day / Night(ICR)			
Focus	Auto / Manual			
AE Mode	Auto / Iris / Shutter / Manual / Bright			
White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)			
BLC	On / Off			
WDR	On / Off			
DE-FOG	On / Off			
Aperture	Adjustable			
Noise Reduction	Yes			
Image Stabilization	On / Off			
Privacy Mask	8 Masks, Spherical Coordinate			
Pan/Tilt Range	Pan : 360°(Endless) / Tilt : -10°~90° Preset : 240°/SEC.			
Pan/Tilt Speed	Manual : 0.1°~240°/SEC.(Proportional to Zoom) Swing : 1°~90°/SEC.			
Preset	255 Presets			
Pattern	4 Patterns [768 Commands(Approximate 5 Minutes)/Pattern]			
Auto Pan	1 Auto Pan			
Group	8 Groups (MAX. 16 Actions with The Combination of Preset)			
Other Functions	Auto Flip, Auto Parking, Power-up Action and Others			
Extra Video Output	CVBS 1Vp-p(NTSC or PAL)			
Communication	RS-485			
Protocol	Pelco-D			
OSD	English			
Sensor Input	2 Inputs, Photo-Coupler Type			
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A			
Audio I/O	Mono Jack, Line In/Out			
Network Interface	Ethernet 10/100 Base-T (RJ-45)			
Memory Slot	Micro SD			
IR LED Wave Length	850nm			
IR LED Distance	350m			
IR LED Brightness	Auto(Proportional to Zoom) / Manual(Off~127)			
Illumination Sensor	CDS Sensor			
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F			
Dimension	226(Ø) x 362.8(H) [mm] / 8.9(Ø) x 14.3(H) ["] / Without a Bracket			
Weight	7 kg / 15.5 lb / Without a Bracket			
Input Power	DC 12V, 3.0A			
Network				
System OS	Embedded Linux			
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS			
ONVIF	Support			
DDNS	Support			
Simultaneous User Access	MAX. 10 Users			
Video Compression Format	H.265, H.264, M-JPEG			
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240			
Video Frame Rate	MAX. 30FPS @ All Resolutions			
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control			
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP			
Audio Compression Format	G.711 u-Law			
Audio Streaming	Two Way			
Web Browser OS	Windows 7, 8, 10			
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- 8 Masks with Spherical Coordinate
- The Shortest Path with Vector Drive Technology
- Micro Control(0.1°/SEC.) with Micro Stepping Control Technology
- 255 Presets / 4 Patterns / 1 Auto Pan / 8 Groups
- Extra CVBS Output
- RS-485 for Easy PTZ Control
- 2 Sensor Inputs & 1 Alarm Output
- Intelligent IR LED Control
- IR LED Distance 350m
- Triple Streaming : H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio

Dimension



2M X20 HD IP PTZ Camera



Specification

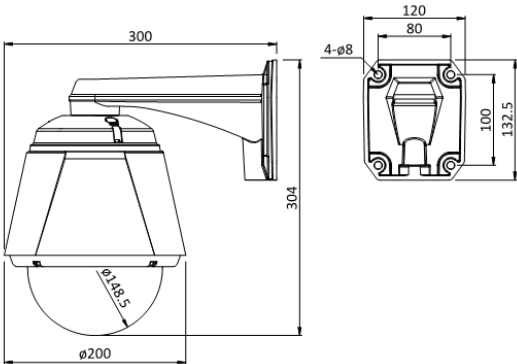
Model		HIP-CZ20W
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X20 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 3.5, f=4.7 ~ 94.0mm
	Angle of View	Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
Pan/Tilt	Aperture	Adjustable
	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 500° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC. (Zoom Proportional) Swing : 10° ~ 180° / SEC.
	Preset	209 Presets (Label, Independent Camera Parameter Setting)
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Video Output	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
	Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
	Video Output	CVBS, 1Vp-p
	RTC(Real Time Clock)	YES (RTC Battery Backup Time : Approximate 2 Weeks)
	Communication	RS-485
	Protocol	Pelco-D
	OSD	YES (English) with Password Protection
	Sensor Input	1 Input, Photo-Coupler Type
	Alarm Output	1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
	Audio Input / Output	Mono, Line In / Out
Physical	Network Interface	Ethernet 10/100 Base-T (RJ-45)
	Memory Slot	Micro SD
	Mount Bracket	Wall Mount Bracket or Ceiling Mount Bracket Dome : Ø148.5mm / Ø5.9"
	Dimension	Wall Mount : 300(L) x 200(W) x 304(H) [mm] / 11.9(L) x 7.9(L) x 12.0(H) ["] Ceiling Mount : 200(Ø) x 402.8(H) [mm] / 7.9(Ø) x 15.9(H) ["]
	Weight	Wall Mount : 3.4 kg / 7.5 lb Ceiling Mount : 3.6 kg / 7.9 lb
	Material	Dome : Poly Carbonate / Housing : Aluminum
	Rated Power	DC 12V / 2.3A
	PoE	Optional / High PoE(PoE+) 802.3aT
	Waterproof	IP 67
	Fan	Always ON
Operating TEMP.	Heater	Operation Start from Internal Temperature 10 °C / 50°F
		-30°C ~ 50°C / -34°F ~ 122°F

Specification & Design are subject to change without prior notice.

Feature

- 2M X20 HD IP PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- 8 Scheduler Functions with RTC(Real Time Clock)
- 1 CVBS Output
- RS-485 with Pelco-D Protocol
- 1 Sensor Input / 1 Sensor Output
- Audio Input & Output
- Memory Slot
- Vandalproof
- Waterproof(IP67)
- Built-in Fan & Heater
- DC 12V
- Optional High PoE(PoE+) 802.3aT

Dimension



2M X20 HD IP PTZ Camera



Specification

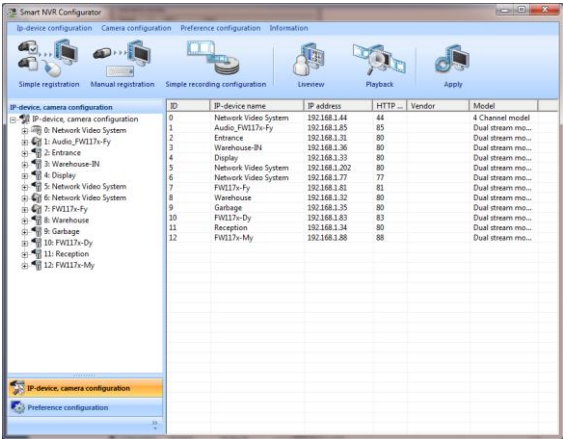
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

Specification & Design are subject to change without prior notice.

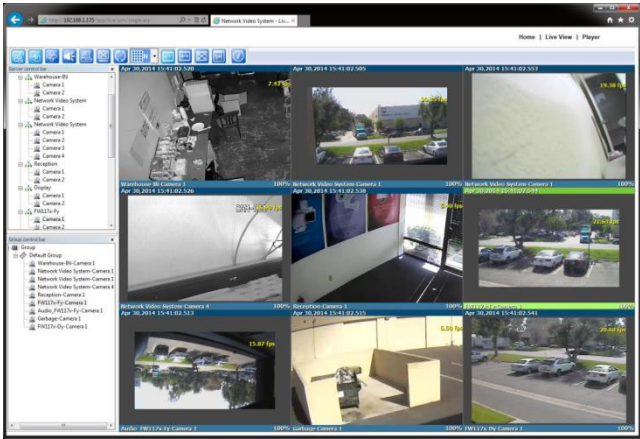
Feature

- High Image Quality with H.264
- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS

2M X30 HD IP PTZ Camera

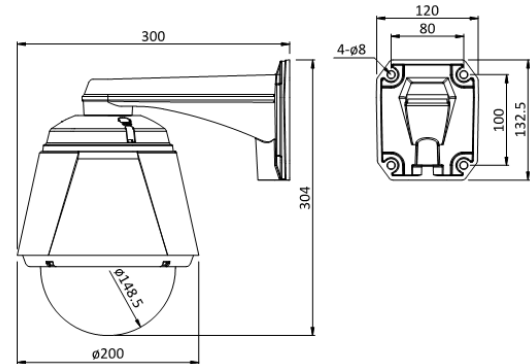


Specification

Feature

- 2M X30 HD IP PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- 8 Scheduler Functions with RTC(Real Time Clock)
- 1 CVBS Output
- RS-485 with Pelco-D Protocol
- 1 Sensor Input / 1 Sensor Output
- Audio Input & Output
- Memory Slot
- Vandalproof
- Waterproof(IP67)
- Built-in Fan & Heater
- DC 12V
- Optional High PoE(PoE+) 802.3aT

Dimension



Model		HIP-CZ30W
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X30 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 4.7, f=4.3 ~ 129.0mm
	Angle of View	Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
	Aperture	Adjustable
Pan/Tilt	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 500° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC. (Zoom Proportional) Swing : 10° ~ 180° / SEC.
	Preset	209 Presets (Label, Independent Camera Parameter Setting)
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output		CVBS, 1Vp-p
RTC(Real Time Clock)		YES (RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D
OSD		YES (English) with Password Protection
Sensor Input		1 Input, Photo-Coupler Type
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
Audio Input / Output		Mono, Line In / Out
Network Interface		Ethernet 10/100 Base-T (RJ-45)
Memory Slot		Micro SD
Physical	Mount Bracket	Wall Mount Bracket or Ceiling Mount Bracket
	Dimension	Dome : Ø148.5mm / Ø5.9" Wall Mount : 300(L) x 200(W) x 304(H) [mm] / 11.9(L) x 7.9(L) x 12.0(H) ["] Ceiling Mount : 200(Ø) x 402.8(H) [mm] / 7.9(Ø) x 15.9(H) ["
	Weight	Wall Mount : 3.4 kg / 7.5 lb Ceiling Mount : 3.6 kg / 7.9 lb
	Material	Dome : Poly Carbonate / Housing : Aluminum
	Rated Power	DC 12V / 2.3A
	PoE	Optional / High PoE(PoE+) 802.3aT
	Waterproof	IP 67
	Fan	Always ON
	Heater	Operation Start from Internal Temperature 10 °C / 50°F
	Operating TEMP.	-30°C ~ 50°C / -34°F ~ 122°F

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2M X30 HD IP PTZ Camera



Specification

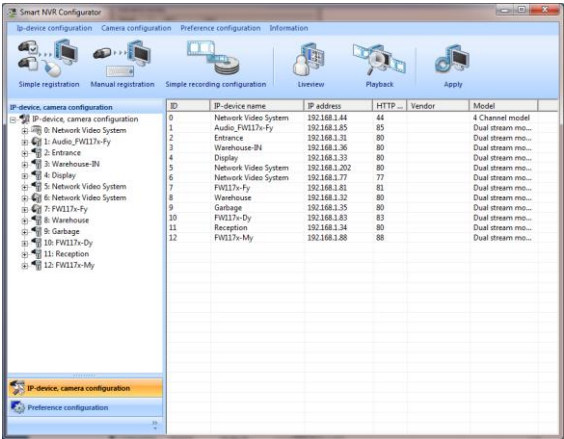
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

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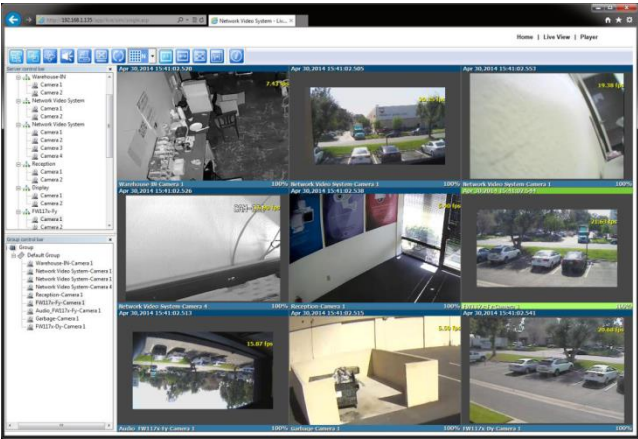
Feature

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- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS

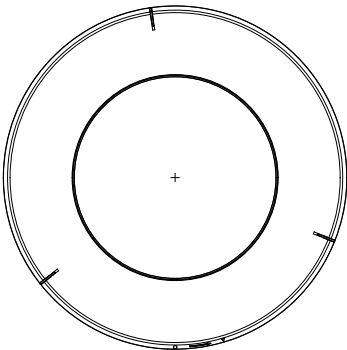
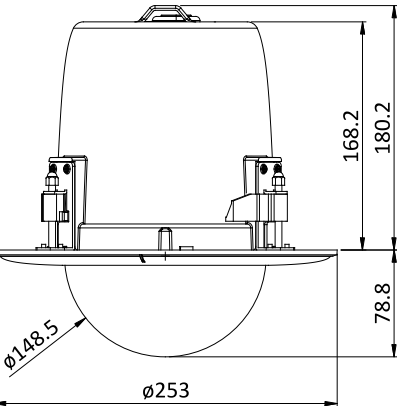
2M X20 HD IP Indoor PTZ Camera



Feature

- 2M X20 HD IP Indoor PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / 3D Digital Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- 8 Scheduler Functions with RTC(Real Time Clock)
- 1 CVBS Output
- RS-485 with Pelco-D Protocol
- 1 Sensor Input / 1 Sensor Output
- Audio Input & Output
- Memory Slot
- Vandalproof
- DC 12V
- Optional High PoE(PoE+) 802.3aT

Dimension



Specification

Model		HIP-CZ20WC
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X20 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 3.5, f=4.7 ~ 94.0mm
	Angle of View	Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
Pan/Tilt	Aperture	Adjustable
	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 500° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC. (Zoom Proportional) Swing : 10° ~ 180° / SEC.
	Preset	209 Presets (Label, Independent Camera Parameter Setting)
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Video Output	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
	Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
	Video Output	CVBS, 1Vp-p
	RTC(Real Time Clock)	YES (RTC Battery Backup Time : Approximate 2 Weeks)
	Communication	RS-485
	Protocol	Pelco-D
	OSD	YES (English) with Password Protection
	Sensor Input	1 Input, Photo-Coupler Type
	Alarm Output	1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
	Audio Input / Output	Mono, Line In / Out
Physical	Network Interface	Ethernet 10/100 Base-T (RJ-45)
	Memory Slot	Micro SD
	Dimension	Dome : Ø148.5mm x Ø5.9"
		253(Ø) x 259(H) [mm] / 10.0(Ø) x 10.2(H) ["]
	Weight	2.3 kg / 5.1 lb
	Material	Dome : Poly Carbonate / Housing : ABS + Poly Carbonate
	Rated Power	DC 12V / 1.8A
	PoE	Optional / High PoE(PoE+) 802.3aT
	Operating TEMP.	0°C ~ 40°C / 32°F ~ 104°F

Specification & Design are subject to change without prior notice.

2M X20 HD IP Indoor PTZ Camera



Specification

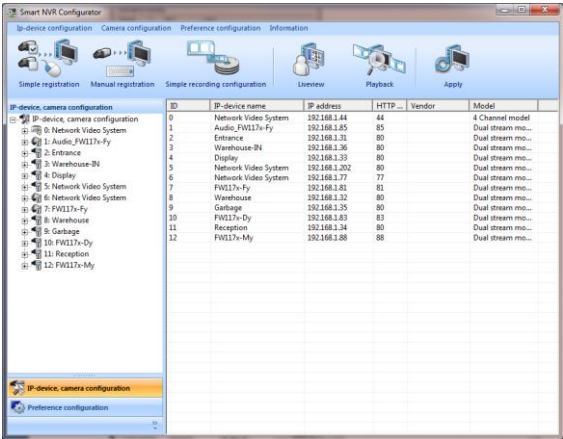
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

Specification & Design are subject to change without prior notice.

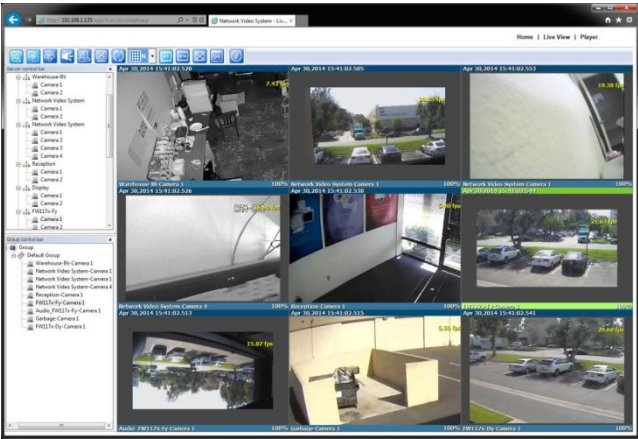
Feature

- High Image Quality with H.264
- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS

2M X30 HD IP Indoor PTZ Camera



Specification

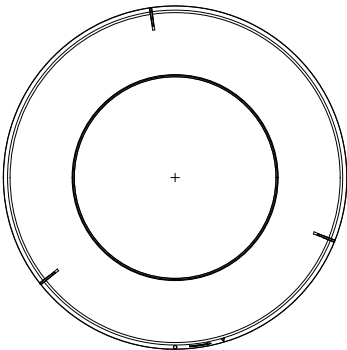
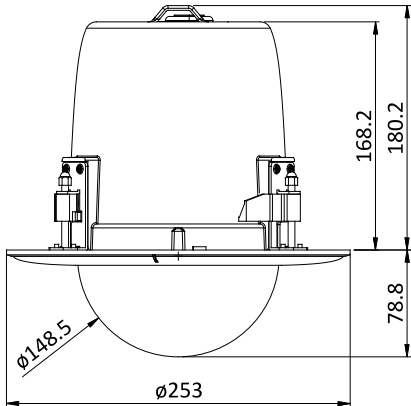
Model		HIP-CZ30WC
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X30 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 4.7, f=4.3 ~ 129.0mm
	Angle of View	Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
	Aperture	Adjustable
Pan/Tilt	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 500° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC. (Zoom Proportional) Swing : 10° ~ 180° / SEC.
	Preset	209 Presets (Label, Independent Camera Parameter Setting)
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output		CVBS, 1Vp-p
RTC(Real Time Clock)		YES (RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D
OSD		YES (English) with Password Protection
Sensor Input		1 Input, Photo-Coupler Type
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
Audio Input / Output		Mono, Line In / Out
Network Interface		Ethernet 10/100 Base-T (RJ-45)
Memory Slot		Micro SD
Physical	Dimension	Dome : Ø148.5mm / Ø5.9"
		253(Ø) x 259(H) [mm] / 10.0(Ø) x 10.2(H) ["]
	Weight	2.3 kg / 5.1 lb
	Material	Dome : Poly Carbonate / Housing : ABS + Poly Carbonate
	Rated Power	DC 12V / 1.8A
PoE		Optional / High PoE(PoE+) 802.3aT
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F

Specification & Design are subject to change without prior notice.

Feature

- 2M X30 HD IP Indoor PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- 8 Scheduler Functions with RTC(Real Time Clock)
- 1 CVBS Output
- RS-485 with Pelco-D Protocol
- 1 Sensor Input / 1 Sensor Output
- Audio Input & Output
- Memory Slot
- Vandalproof
- DC 12V
- Optional High PoE(PoE+) 802.3aT

Dimension



2M X30 HD IP Indoor PTZ Camera



Specification

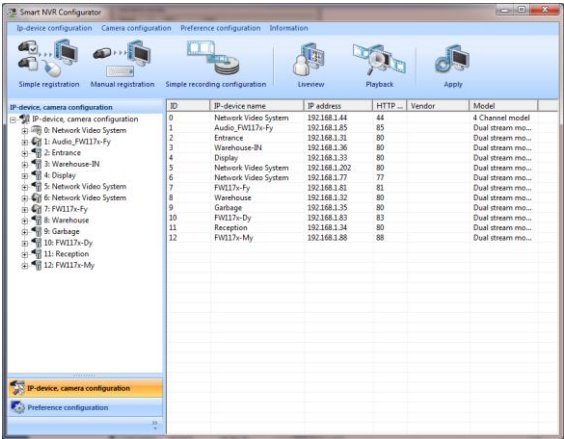
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

Specification & Design are subject to change without prior notice.

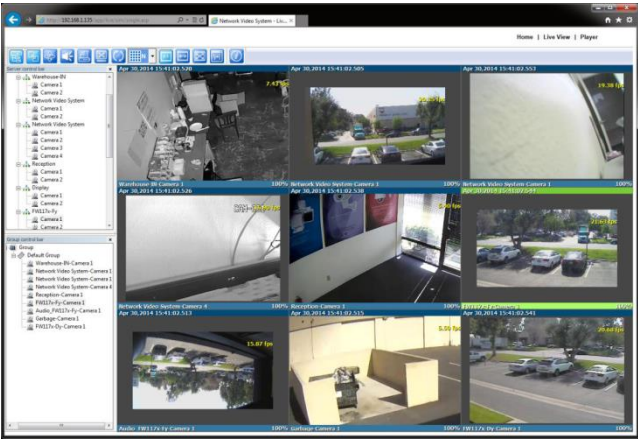
Feature

- High Image Quality with H.264
- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS

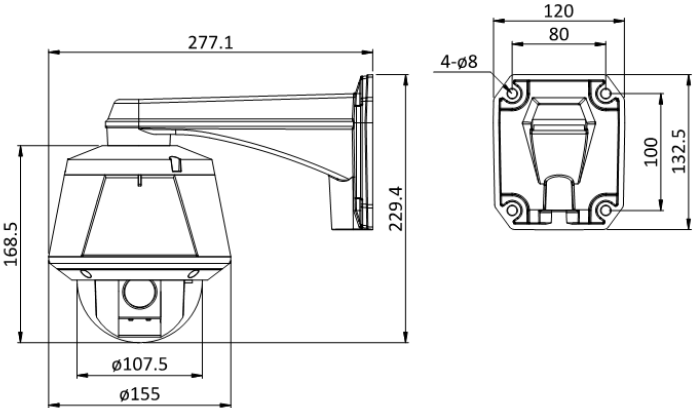
2M X10 HD IP Mini PTZ Camera



Specification

Model		HIP-CZ10W
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X10 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 1.8, f=5.1 ~ 51mm
	Angle of View	Horizontal : 54°(Wide) ~ 4.9°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
	Aperture	Adjustable
Pan/Tilt	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 360° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC.(Zoom Proportional)
		Swing : 10° ~ 180° / SEC.
	Preset	209 Presets
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
	Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
	Video Output	CVBS, 1.0 Vp-p
	RTC(Real Time Clock)	RTC Battery Backup Time : Approximate 2 Weeks
	Communication	RS-485
Physical	Protocol	Pelco-D
	OSD	English(Menu, Time, PTZ Information, Password Protection and Others)
	Sensor Input	1 Input, Photo-Coupler Type
	Alarm Output	1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
	Audio Input / Output	Mono, Line In / Out
	Network Interface	Ethernet 10/100 Base-T(RJ-45)
	Memory Slot	Micro SD
	Mount Bracket	Wall Mount Bracket or Ceiling Mount Bracket Dome : ϕ 107.5 mm / ϕ 4.3"
	Dimension	Wall Mount : 277.1(L) x 155(W) x 229.4(H) [mm] / 11.0(L) x 6.2(L) x 9.1(H) ["] Ceiling Mount : 155(ϕ) x 328.5(H) [mm] / 6.2(ϕ) x 13.0(H) ["]
	Weight	Wall Mount : 2.7 kg / 6.0 lb / Ceiling Mount : 2.9 kg / 6.4 lb
	Material	Dome : Poly Carbonate / Housing : Aluminum
	Rated Power	DC 12V / 2.3A
	Waterproof	IP 67
	Fan	Always ON
	Heater	Operation Start from Internal Temperature 10 °C / 50°F
	Operating TEMP.	-30°C ~ 50°C / -22°F ~ 122°F

Specification & Design are subject to change without prior notice.



2M X10 HD IP Mini PTZ Camera



Specification

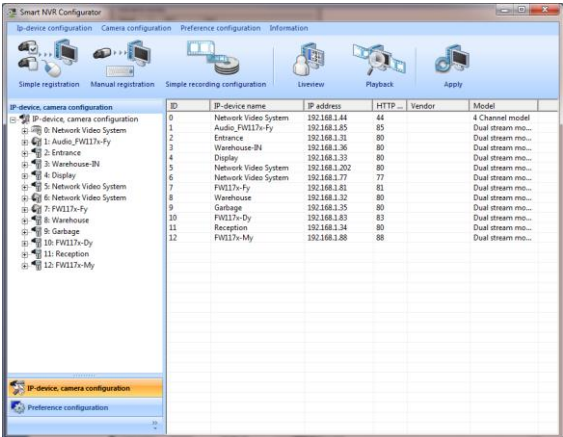
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

Specification & Design are subject to change without prior notice.

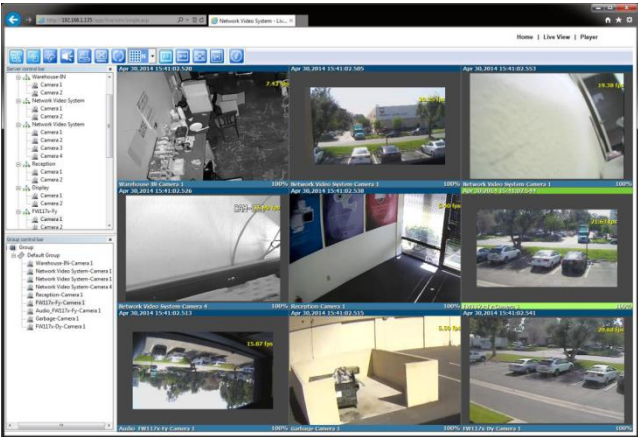
Feature

- High Image Quality with H.264
- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS

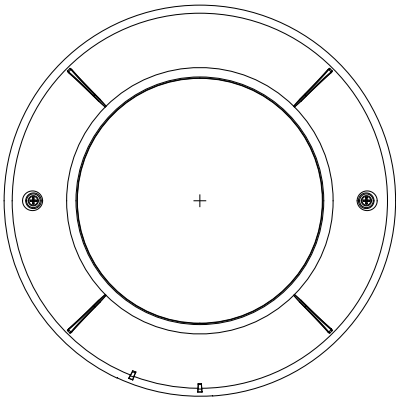
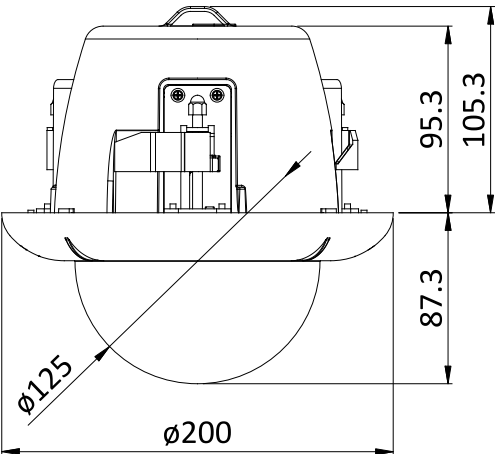
2M X10 HD IP Indoor Mini PTZ Camera



Feature

- 2M X10 HD IP Indoor Mini PTZ Camera
- X120 Zoom Control(Optical X10 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(360°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- 8 Scheduler Functions with RTC(Real Time Clock)
- CVBS Output
- RS-485 with Pelco-D Protocol
- 1 Sensor Input / 1 Sensor Output
- Audio Input & Output
- Memory Slot
- Vandalproof
- DC 12V

Dimension



Specification

Model		HIP-CZ10IC
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X10 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 1.8, f=5.1 ~ 51mm
	Angle of View	Horizontal : 54°(Wide) ~ 4.9°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
	Aperture	Adjustable
Pan/Tilt	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : 90° Preset : 360° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 360° / SEC.(Zoom Proportional)
		Swing : 10° ~ 180° / SEC.
	Preset	209 Presets
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups
		(MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
	Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
	Video Output	CVBS, 1.0 Vp-p
	RTC(Real Time Clock)	RTC Battery Backup Time : Approximate 2 Weeks
Physical	Communication	RS-485
	Protocol	Pelco-D
	OSD	English(Menu, Time, PTZ Information, Password Protection and Others)
	Sensor Input	1 Input, Photo-Coupler Type
	Alarm Output	1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
	Audio Input / Output	Mono, Line In / Out
	Network Interface	Ethernet 10/100 Base-T(RJ-45)
	Memory Slot	Micro SD
	Dimension	Dome : Ø125mm / Ø5.0"
		200(Ø) x 192.6(H) [mm] / 7.9(Ø) x 7.6(H) ["]
	Weight	1.6 kg / 3.6 lb
	Material	Dome : Poly Carbonate / Housing : ABS + Poly Carbonate
	Rated Power	DC 12V / 1.5A
	Operating TEMP.	0°C ~ 40°C / 32°F ~ 104°F

Specification & Design are subject to change without prior notice.

2M X10 HD IP Indoor Mini PTZ Camera



Specification

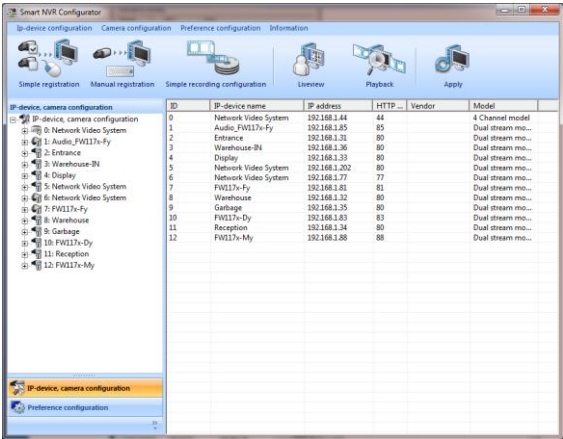
IP Part	
Video Compression	M-JPEG / H.264 Dual Streaming
Audio Compression	G.711 u-law, G.726 4 bits ADPCM
Resolution	MAX. Full HD(1080p30), 1920x1080, 1280x720, 640x352, 320x176
Compression Level	6 Levels (Low Compression / Highest / High / Normal / Low / Lowest)
Live Casting	Up to 30 FPS @ 1920x1080 Resolution
Audio Support	2 Way Live Audio
Transmission Control	VBR, CBR (32Kbps ~ 12Mbps)
Alarm Management	[Trigger] Video Loss / Video Recovered / Motion Detection / Sensor Input / Boot / Serial / Schedule and Others [Service] Image Buffering Service (8Mbytes Pre-Post Alarm Buffer), FTP/E-Mail Notification Service
Dynamic IP Support	Dedicated Dynamic IP Service using www.ipcctvdns.com
Security	Password Protection for Live, PTZ, Alarm Output and Audio
Software (IE)	Live-Cast and PTZ Control through Web Browser with Audio (MIN. PC Requirement : Windows XP, 2000, Vista / IE6.x or Higher / Pentium IV 1.6GHz or Higher)
CMS	Support Free 16 Channels, Full Featured PC NVR (MIN. PC Requirement : Windows XP, 2000 / Pentium IV 1.6GHz CPU or Higher / 256 Mbytes RAM or Higher / 64 Mbytes Video Memory or Higher)
Protocol	HTTP, TCP/UDP/IP, ARP, ICMP, RTP/RTSP, Multicast, Telnet, FTP, PPPoE, SMTP(E-Mail), DHCP, NTP, uPNP and Others ONVIF, PSIA Support
SDK	Open HTTP API, ActiveX for Live-Cast with Audio and PTZ
Installation & Maintenance	Configuration : Installation Wizard, HTTP, Telnet and Console Firmware Upgrade : HTTP, Telnet+FTP
Miscellaneous	Serial Input Data Transmission with Video, Different Time Zone Support, User-Wise Authentication Data and Time can be synchronized with an external NTP server, Live-Cast for up to 16 clients.

Specification & Design are subject to change without prior notice.

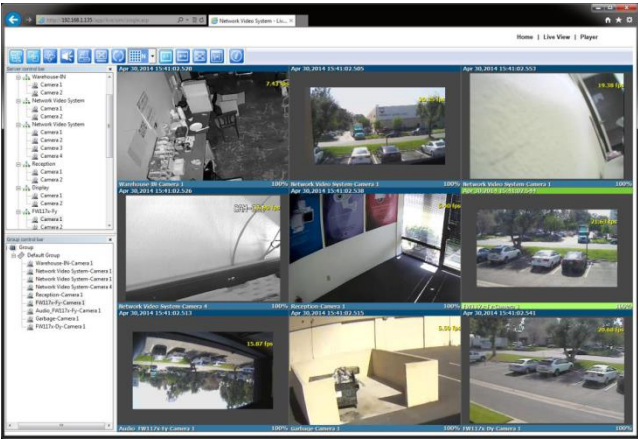
Feature

- High Image Quality with H.264
- H.264 & M-JPEG Dual Streaming
- Various Resolution Support
- Various Compression Level Support
- 30FPS @ 1920x1080
- 2 Way Live Audio
- Convenient Alarm Management
- Dynamic IP Support
- Various Network Protocol Support
- SDK Support
- ONVIF / PSIA Support

GUI



IP Finder



CMS



AHD PTZ CAMERA

2M X20 AHD IR PTZ Camera

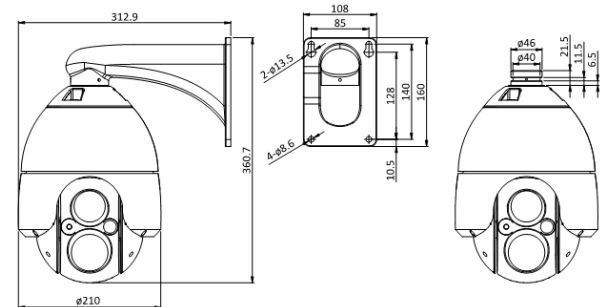


Specification

Feature

- 2M X20 AHD IR PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0 Lux @ IR Mode
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(240°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- Independent Preset Parameter Setup
- 8 Scheduler Functions with RTC(Real Time Clock)
- Super Video Quality
- AHD 2.0 Standard Support
- Simultaneous AHD & Composite Output
- OSD Menu with Password Function
- 2 Sensor Inputs / 1 Alarm Output
- Intelligent Varifocal IR LED Control
- Vandalproof
- DC 12V
- Waterproof(IP66)

Dimension



Model	HAP-CZ20IRW
Image Sensor	1/3" Panasonic CMOS Sensor
Pixel	2,000K Pixels
Zoom	Optical X20 / Digital X12
Video Signal to Noise	More than 50 dB
Focal Length	F1.6 ~ 3.5, f=4.7 ~ 94.0mm
Angle of View	Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
MIN. Illuminance	0.5 Lux(Color) / 0 Lux(B/W, IR Mode) @ DSS Off 0.125 Lux(Color) / 0 Lux(B/W, IR Mode) @ DSS On
Day & Night	Auto / Day / Night(ICR)
Focus	Auto / Manual / Semi-Auto
AE Mode	Auto / Iris / Shutter / Manual
White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC	On / Off
WDR	On / Off
De-Fog	On / Off
Aperture	Adjustable
Noise Reduction	Auto / Off / 1 ~ 3 Level
Image Stabilization	On / Off
Privacy Zone	8 Masks with Spherical Coordinate
Range	Pan : 360°(Endless) / Tilt : -20° ~ 90° Preset : 240° / SEC.
Pan/Tilt Speed	Manual : 0.05° ~ 240° / SEC.(Zoom Proportional) Swing : 10° ~ 180° / SEC.
Preset	209 Presets(Label, Independent Camera Parameter Setting)
Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
Swing	10 Swings
Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
Output	2 x BNC(AHD and CVBS)
AHD	AHD 2.0 Standard
AHD Resolution	1080p/30/25, 720p/60/50, 720p/30/25
CVBS	1.0 Vp-p
RTC(Real Time Clock)	YES(RTC Battery Backup Time : Approximate 2 Weeks)
Communication	RS-485
Protocol	Pelco-D, Pelco-P Selectable
OSD	YES (English) with Password Protection
Sensor Input	2 Inputs, Photo-Coupler Type, DC 5V~12V
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
IR LED	Source Control Intelligent Varifocal IR LED Control
Wave Length	850nm
View Angle	7° ~ 40°(Proportional to Zoom)
Visible Distance	150M
Mount Bracket	Wall Mount Bracket or Ceiling Mount Bracket
Dimension	Wall Mount : 312.9(L) x 210(W) x 360.7(H) [mm] / 12.4(L) x 8.3(L) x 14.3(H) ["]
Weight	Ceiling Mount : 210(Ø) x 480.7(H) [mm] / 8.3(Ø) x 19.0(H) ["] Wall Mount : 7 kg / 15.5 lb / Ceiling Mount : 7 kg / 15.5 lb
Material	Aluminum
Rated Power	DC 12V / 3.5A
Waterproof	IP 66
Operating TEMP.	-10°C ~ 50°C / 14°F ~ 122°F

Specification & Design are subject to change without prior notice.

2M X30 AHD IR PTZ Camera



Specification

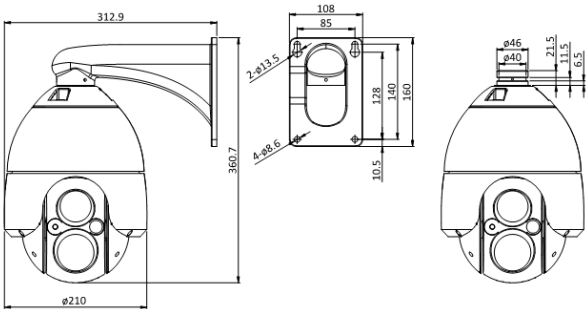
Model		HAP-CZ30IRW
Camera	Image Sensor	1/3" Panasonic CMOS Sensor
	Pixel	2,000K Pixels
	Zoom	Optical X30 / Digital X12
	Video Signal to Noise	More than 50 dB
	Focal Length	F1.6 ~ 4.7, f=4.3 ~ 129.0mm
	Angle of View	Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
	MIN. Illuminance	0.5 Lux(Color) / 0 Lux(B/W, IR Mode) @ DSS Off 0.125 Lux(Color) / 0 Lux(B/W, IR Mode) @ DSS On
	Day & Night	Auto / Day / Night(ICR)
	Focus	Auto / Manual / Semi-Auto
	AE Mode	Auto / Iris / Shutter / Manual
	White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
	BLC	On / Off
	WDR	On / Off
	De-Fog	On / Off
Pan/Tilt	Aperture	Adjustable
	Noise Reduction	Auto / Off / 1 ~ 3 Level
	Image Stabilization	On / Off
	Privacy Zone	8 Masks with Spherical Coordinate
	Range	Pan : 360°(Endless) / Tilt : -20° ~ 90° Preset : 240° / SEC.
	Pan/Tilt Speed	Manual : 0.05° ~ 240° / SEC.(Zoom Proportional) Swing : 10° ~ 180° / SEC.
	Preset	209 Presets(Label, Independent Camera Parameter Setting)
	Pattern	4 Patterns [768 Commands(Approximate 5 Minutes) / 1 Pattern]
	Swing	10 Swings
	Group	8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Video	Scheduler Function	8 Scheduler Functions with RTC(Real Time Clock)
	Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
	Output	2 x BNC(AHD and CVBS)
	AHD	AHD 2.0 Standard
	AHD Resolution	1080p/30/25, 720p/60/50, 720p/30/25
	CVBS	1.0 Vp-p
RTC(Real Time Clock)		YES(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		YES (English) with Password Protection
Sensor Input		2 Inputs, Photo-Coupler Type, DC 5V~12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V / 1.0A or AC 125V / 0.5A
IR LED	Source	Varifocal IR III Generation
	Control	Intelligent Varifocal IR LED Control
	Wave Length	850nm
	View Angle	7° ~ 40°(Proportional to Zoom)
	Visible Distance	150M
Physical	Mount Bracket	Wall Mount Bracket or Ceiling Mount Bracket
	Dimension	Wall Mount : 312.9(L) x 210(W) x 360.7(H) [mm] / 12.4(L) x 8.3(L) x 14.3(H) ["]
	Weight	Ceiling Mount : 210(Ø) x 480.7(H) [mm] / 8.3(Ø) x 19.0(H) ["] Wall Mount : 7 kg / 15.5 lb / Ceiling Mount : 7 kg / 15.5 lb
	Material	Aluminum
	Rated Power	DC 12V / 3.5A
	Waterproof	IP 66
	Operating TEMP.	-10°C ~ 50°C / 14°F ~ 122°F

Specification & Design are subject to change without prior notice.

Feature

- 2M X30 AHD IR PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0 Lux @ IR Mode
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(240°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 10 Swings / 4 Patterns / 8 Groups
- Independent Preset Parameter Setup
- 8 Scheduler Functions with RTC(Real Time Clock)
- Super Video Quality
- AHD 2.0 Standard Support
- Simultaneous AHD & Composite Output
- OSD Menu with Password Function
- 2 Sensor Inputs / 1 Alarm Output
- Intelligent Varifocal IR LED Control
- Vandalproof
- DC 12V
- Waterproof(IP66)

Dimension



HAP-CZ20W



2M X20 AHD PTZ Camera



Specification

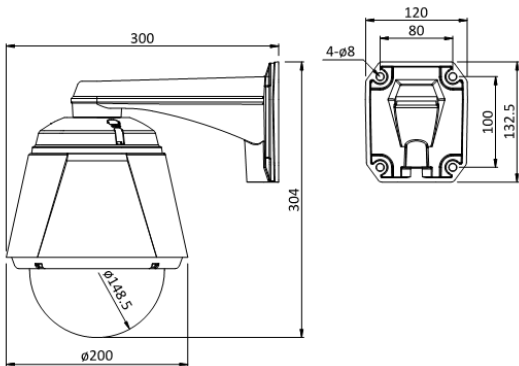
Model		HAP-CZ20W
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X20 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 3.5, f=4.7 ~ 94.0mm
Angle of View		Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Fan		Always ON
Heater		Operation Start from Internal Temperature 10 °C / 50°F
Operating TEMP.		-30°C ~ 50°C / -22°F ~ 122°F
Power Input		Dual Power Support / DC 12V, 1.8A or AC 24V, 1.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Aluminum
Dimension	Dome	Ø148.5mm / Ø5.9"
	Wall Type	300(L) x 200(W) x 304(H) [mm] / 11.9(L) x 7.9(W) x 12.0(H) ["]
	Ceiling Type	200(Ø) x 402.8(H) [mm] / 7.9(Ø) x 15.9(H) ["]
Weight	Wall Type	3.4 kg / 7.5 lb
	Ceiling Type	3.6 kg / 7.9 lb

* Specification & Design are subject to change without prior notice.

Feature

- 2M X20 AHD PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Built-in Fan & Heater
- Dual Power Input(AC 24V or DC 12V)

Dimension



2M X30 AHD PTZ Camera



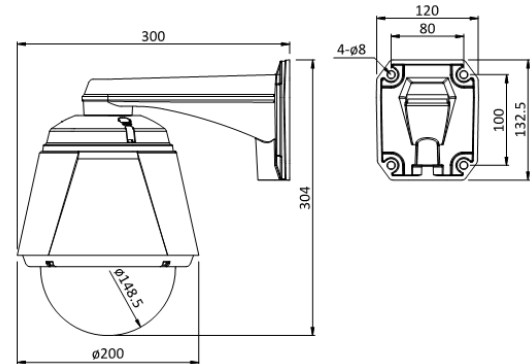
Specification

Feature

- 2M X30 AHD PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Built-in Fan & Heater
- Dual Power Input(AC 24V or DC 12V)

Model		HAP-CZ30W
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X30 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 4.7, f=4.3 ~ 129.0mm
Angle of View		Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Fan		Always ON
Heater		Operation Start from Internal Temperature 10 °C / 50°F
Operating TEMP.		-30°C ~ 50°C / -22°F ~ 122°F
Power Input		Dual Power Support / DC 12V, 1.8A or AC 24V, 1.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Aluminum
Dimension	Dome	ø148.5mm / ø5.9"
	Wall Type	300(L) x 200(W) x 304(H) [mm] / 11.9(L) x 7.9(W) x 12.0(H) ["]
	Ceiling Type	200(ø) x 402.8(H) [mm] / 7.9(ø) x 15.9(H) ["]
Weight	Wall Type	3.4 kg / 7.5 lb
	Ceiling Type	3.6 kg / 7.9 lb

* Specification & Design are subject to change without prior notice.



HAP-CZ20WC



2M X20 AHD PTZ Camera



Specification

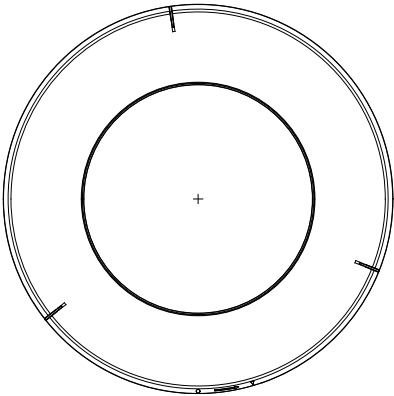
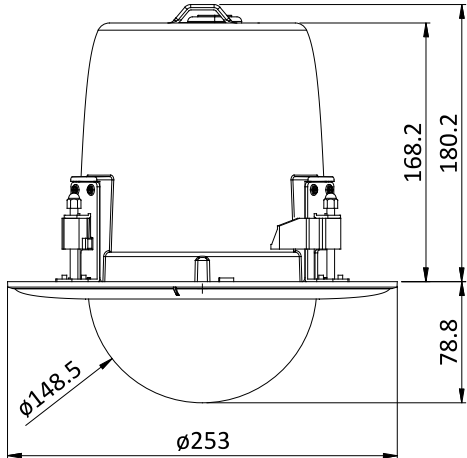
Model		HAP-CZ20WC
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X20 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 3.5, f=4.7 ~ 94.0mm
Angle of View		Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		Dual Power Support / DC 12V, 1.0A or AC 24V, 0.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate
Dimension	Dome	Ø148.5mm / Ø5.9"
	In-Ceiling Type	253(Ø) x 259(H) [mm] / 10.0(Ø) x 10.2(H) ["]
Weight		In-Ceiling Type 2.3 kg / 5.1 lb

Specification & Design are subject to change without prior notice.

Feature

- 2M X20 AHD PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Dual Power Input(AC 24V or DC 12V)

Dimension



HAP-CZ30WC



2M X30 AHD PTZ Camera



Specification

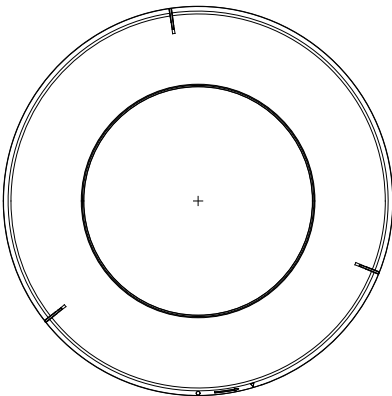
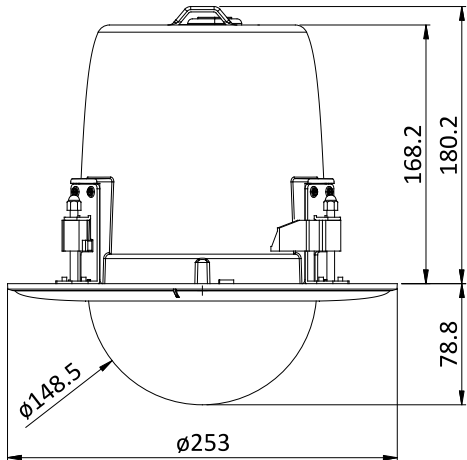
Model		HAP-CZ30WC
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X30 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 4.7, f=4.3 ~ 129.0mm
Angle of View		Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		Dual Power Support / DC 12V, 1.0A or AC 24V, 0.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate
Dimension	Dome	Ø148.5mm / Ø5.9"
	In-Ceiling Type	253(Ø) x 259(H) [mm] / 10.0(Ø) x 10.2(H) ["]
Weight	In-Ceiling Type	2.3 kg / 5.1 lb

Specification & Design are subject to change without prior notice.

Feature

- 2M X30 AHD PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Dual Power Input(AC 24V or DC 12V)

Dimension



HAP-CZ20WS



2M X20 AHD PTZ Camera



Specification

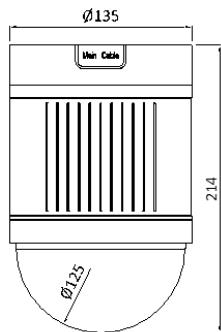
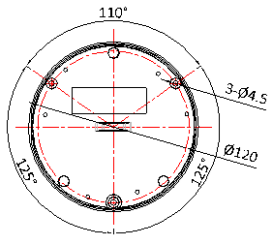
Model		HAP-CZ20WS
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X20 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 3.5, f=4.7 ~ 94.0mm
Angle of View		Horizontal : 58.7°(Wide) ~ 3.2°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		Dual Power Support / DC 12V, 1.0A or AC 24V, 0.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate, ABS, Aluminum
Dimension	Dome	Dome : Ø125mm / Ø5.0"
	Surface Type	135(Ø) x 214(H) [mm] / 5.4(Ø) x 8.5(H) ["]
Weight	Surface Type	1.6 kg / 3.6 lb

Specification & Design are subject to change without prior notice.

Feature

- 2M X20 AHD PTZ Camera
- X240 Zoom Control(Optical X20 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Dual Power Input(AC 24V or DC 12V)

Dimension



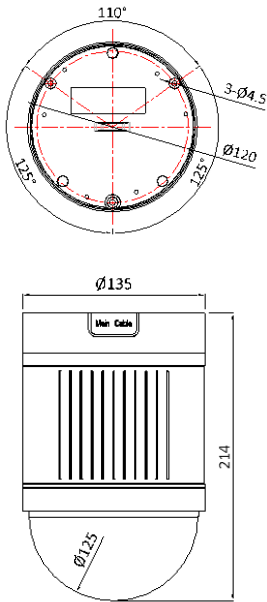
2M X30 AHD PTZ Camera



Feature

- 2M X30 AHD PTZ Camera
- X360 Zoom Control(Optical X30 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(500°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- Dual Power Input(AC 24V or DC 12V)

Dimension



Specification

Model		HAP-CZ30WS
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X30 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 4.7, f=4.3 ~ 129.0mm
Angle of View		Horizontal : 58.9°(Wide) ~ 2.11°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	500°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output		AHD 2.0
	HD	NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		Dual Power Support / DC 12V, 1.0A or AC 24V, 0.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate, ABS, Aluminum
Dimension	Dome	Dome : Ø125mm / Ø5.0"
	Surface Type	135(Ø) x 214(H) [mm] / 5.4(Ø) x 8.5(H) ["]
Weight	Surface Type	1.6 kg / 3.6 lb

Specification & Design are subject to change without prior notice.

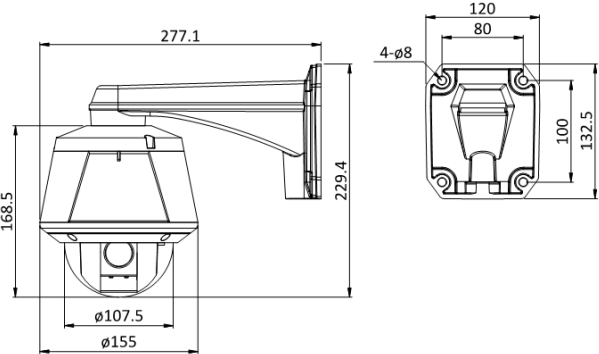
2M X10 AHD Mini PTZ Camera



Specification

Model		HAP-CZ10W
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X10 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 1.8, f=5.1 ~ 51mm
Angle of View		Horizontal : 54°(Wide) ~ 4.9°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	360°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups
Schedule Function		(MAX. 40 Actions with The Combination of Preset, Pattern and Swing) 8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Fan		Always ON
Heater		Operation Start from Internal Temperature 10 °C / 50°F
Operating TEMP.		-30°C ~ 50°C / -22°F ~ 122°F
Power Input		DC 12V, 1.8A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Aluminum
Dimension	Dome	Dome : Ø107.5 mm / Ø4.3"
	Wall Type	277.1(L) x 155(W) x 229.4(H) [mm] / 11.0(L) x 6.2(L) x 9.1(H) ["]
	Ceiling Type	155(Ø) x 328.5(H) [mm] / 6.2(Ø) x 13.0(H) ["]
Weight	Wall Type	2.7 kg / 6.0 lb
	Ceiling Type	2.9 kg / 6.4 lb

Specification & Design are subject to change without prior notice.



2M X10 AHD Mini PTZ Camera



Specification

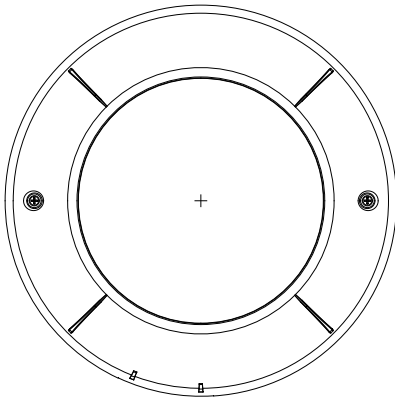
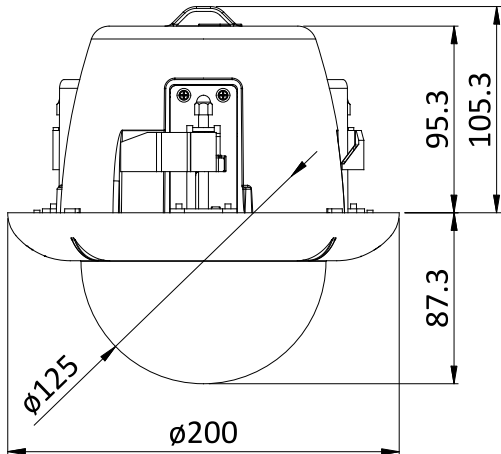
Model		HAP-CZ10IC
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X10 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 1.8, f=5.1 ~ 51mm
Angle of View		Horizontal : 54°(Wide) ~ 4.9°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Presets	360°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern]
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		DC 12V, 1.0A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate
Dimension	Dome	ø125mm / ø5.0"
	In-Ceiling Type	200(ø) x 192.6(H) [mm] / 7.9(ø) x 7.6(H) ["]
Weight		In-Ceiling Type 1.6 kg / 3.6 lb

Specification & Design are subject to change without prior notice.

Feature

- 2M X10 AHD Mini PTZ Camera
- X120 Zoom Control(Optical X10 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(360°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- DC 12V

Dimension



2M X10 AHD Mini PTZ Camera



Specification

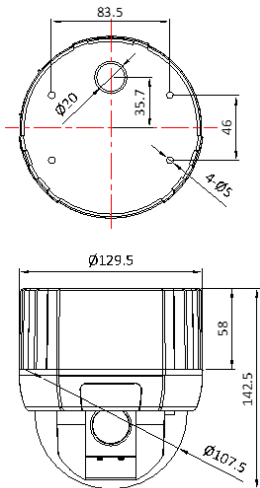
Model		HAP-CZ10S
Image Sensor		1/3" Panasonic CMOS Sensor
Pixel		2,000K Pixels
Zoom		Optical X10 / Digital X12
Video Signal to Noise		More than 50 dB
Focal Length		F1.6 ~ 1.8, f=5.1 ~ 51mm
Angle of View		Horizontal : 54°(Wide) ~ 4.9°(Tele)
MIN. Illuminance		0.5 Lux(Color) / 0.1 Lux(B/W) @ DSS Off 0.125 Lux(Color) / 0.025 Lux(B/W) @ DSS On
Day & Night		Auto / Day / Night(ICR)
Focus		Auto / Manual / Semi-Auto
AE Mode		Auto / Iris / Shutter / Manual
White Balance		Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC		On / Off
WDR		On / Off
De-Fog		On / Off
Aperture		Adjustable
Noise Reduction		Auto / Off / 1 ~ 3 Level
Image Stabilization		On / Off
Privacy Zone		8 Masks with Spherical Coordinate
Movement Range	Pan	360°(Endless)
	Tilt	90°
	Preset	360°/SEC.
Speed	Jog	0.05° ~ 360°/SEC.(Proportional to Zoom)
	Swing	1° ~ 180°/SEC.
Preset		209 Presets(Label, Independent Camera Parameter Configuration)
Pattern		8 Patterns(880 Commands(Approximate 4 Minutes) / 1 Pattern)
Swing		10 Swings
Group		8 Groups (MAX. 40 Actions with The Combination of Preset, Pattern and Swing)
Schedule Function		8 Schedule Functions with RTC(Real Time Clock)
Other Functions		Auto Flip, Auto Parking, Power-up Action and Others
Video Output	HD	AHD 2.0 NTSC : 1920x1080p30, 1280x720p60, 1280x720p30 PAL : 1920x1080p25, 1280x720p50, 1280x720p25
		1.0 Vp-p / No Video Output when WDR is ON.
	Analogue	1.0 Vp-p / No Video Output when WDR is ON.
RTC(Real Time Clock)		Yes(RTC Battery Backup Time : Approximate 2 Weeks)
Communication		RS-485
Protocol		Pelco-D, Pelco-P Selectable
OSD		4 Languages(English, Polish, French, Italian) OSD Protection with Password
Sensor Input		3 Inputs, Photo-Coupler Type, DC 5V ~ 12V
Alarm Output		1 Output, Relay Output, MAX. Load DC 24V, 1.0A or AC 125V, 0.5A
Operating TEMP.		0°C ~ 40°C / 32°F ~ 104°F
Power Input		DC 12V, 1.0A
Material	Dome	Polycarbonate
	Internal	Polycarbonate, ABS
	External	Polycarbonate
Dimension	Dome	Ø107.5mm / Ø4.3"
	Surface Type	129.5(Ø) x 142.5(H) [mm] / 5.1(Ø) x 5.7(H) ["]
Weight		0.7 kg / 1.6 lb

Specification & Design are subject to change without prior notice.

Feature

- 2M X10 AHD Mini PTZ Camera
- X120 Zoom Control(Optical X10 / Digital X12)
- MIN. Illuminance : 0.025 Lux(B/W) @ DSS On
- True Day & Night(ICR)
- BLC / WDR / De-Fog / Noise Reduction
- Image Stabilization
- 8 Privacy Masks with Spherical Coordinates
- Super Speed(360°/SEC.) with 360° Endless Pan Rotation
- The Shortest Path with Vector Drive Technology
- Micro Control(0.05°/SEC.) with Micro Stepping Control Technology
- 209 Presets / 8 Patterns / 10 Swings / 8 Groups
- Independent Preset Parameter Configuration
- Presets with Labels
- 8 Schedule Functions with RTC(Real Time Clock)
- AHD 2.0
- Simultaneous AHD & CVBS Output
- OSD Menu with Password Protection
- 3 Sensor Inputs / 1 Alarm Output
- DC 12V

Dimension





IP / HD-SDI ZOOM BOX CAMERA

HIZ-HB30W / 20W / 10W



2MP, 1/3" HD IP Zoom Box Camera



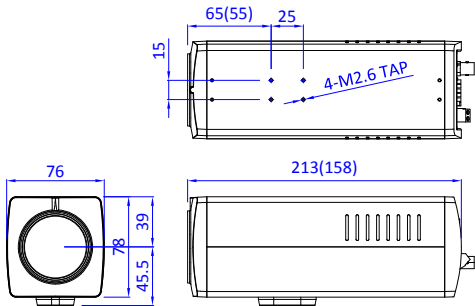
Specification

Model	HIZ-HB30W	HIZ-HB20W	HIZ-HB10W
Camera			
Image Sensor	1/3" Panasonic CMOS Sensor		
Pixel	2,120K Pixels		
Resolution	MAX. 1920 x 1080p (30/25FPS)		
Zoom	Optical x30, Digital x32	Optical x20, Digital x32	Optical x10, Digital x32
Video Signal-to-Noise	More than 50 dB		
Focal Length	F1.6 ~ F4.7, f=4.3mm ~ 129mm	F1.6 ~ F3.5, f=4.7mm ~ 94mm	F1.6 ~ F1.8, f=5.1mm ~ 51mm
Angle of View	H : 58.9°(Wide) ~ 2.11°(Tele), V : 45.3°(Wide) ~ 1.61°(Tele)	H : 55.4°(Wide) ~ 2.9°(Tele), V : 32.6°(Wide) ~ 1.6°(Tele)	H : 54°(Wide) ~ 4.9°(Tele), V : 31°(Wide) ~ 4°(Tele)
MIN. Illuminance	DSS Off : 0.5 Lux @ Color, 0.1 Lux @ B/W DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W		
Day & Night	Auto / Day / Night(ICR)		
Focus	Auto / Manual / One-Push		
AE Mode	Auto / Iris / Shutter / Manual		
AGC	On / Off		
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]		
DSS	Off / MAX. x2 ~ x4		
Flickerless	On / Off		
Iris	0 ~ 20		
Brightness	0 ~ 20		
White Balance	Auto / One-Push / Manual / Indoor / Outdoor		
WDR / BLC	Off / WDR / BLC		
HLC	On / Off		
De-Fog	On / Off		
Sharpness	0 ~ 10		
DNR	Auto / Off / Low / Middle / High		
Motion Detection	3 Positions		
Privacy Mask	24 Masks		
OSD Menu	English, Simplified Chinese, Traditional Chinese, Japanese		
Ethernet	Ethernet 10/100 Base-T (RJ-45)		
Video Output	CVBS, 1Vp-p		
Audio I/O	Mono Jack, Line In/Out		
Memory Slot	Micro SD		
Serial Port	RS-485, Pelco-D		
Sensor Input	1 Input, Photo-Coupler Type		
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A		
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F		
Dimension	76(W) x 78(H) x 213(L) [mm] / 3(W) x 3.1(H) x 8.4(L) ["]	76(W) x 78(H) x 213(L) [mm] / 3(W) x 3.1(H) x 8.4(L) ["]	76(W) x 78(H) x 158(L) [mm] / 3(W) x 3.1(H) x 6.3(L) ["]
Weight	1.05 Kg / 2.3 lb	1.05 Kg / 2.3 lb	920 g / 2 lb
PoE(Power over Ethernet)	802.3af		
Input Power	DC 12V, 0.8A or PoE		
Network			
System OS	Embedded Linux		
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS		
ONVIF	Version 17.06		
DDNS	Support		
Simultaneous User Access	MAX. 10 Users		
Video Compression Format	H.265, H.264, M-JPEG		
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240		
Video Frame Rate	MAX. 30FPS @ All Resolutions		
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control		
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP		
Audio Compression Format	G.711 u-Law		
Audio Streaming	Two Way		
Web Browser OS	Windows 7, 8, 10		
Web Browser Manager	IE11, Firefox, Safari, Opera		
Web Browser Viewer	IE11 or Higher (Active-X)		
# Specification & Design are subject to change without prior notice.			

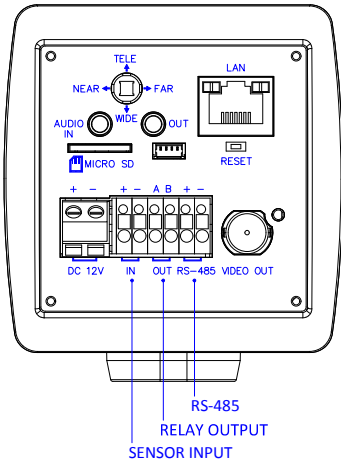
Overview

- HD IP Zoom Box Camera
- 1/3" Panasonic CMOS Sensor
- MAX. 1920 x 1080p (30/25FPS)
- Optical x30, x20, x10 & Digital x32
- DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W
- Day & Night
- De-Fog
- 3 Motion Detection Positions
- 24 Privacy Masks
- 1 Sensor Input & 1 Alarm Output
- RS-485
- PoE
- H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio

Dimension



▪ Dimension & Weight are different by models.



HIZ-HB36L / 30L / 12L



2MP, 1/1.9" Low Light HD IP Zoom Box Camera



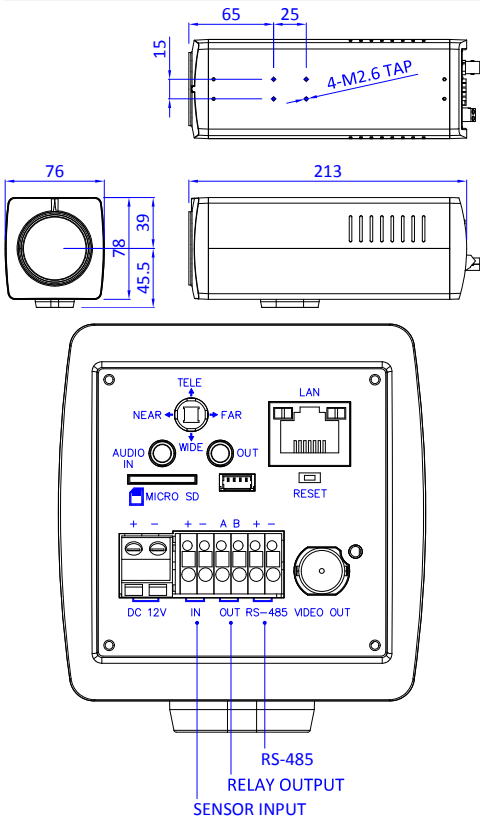
Specification

Model	HIZ-HB36L	HIZ-HB30L	HIZ-HB12L
Camera			
Image Sensor	1/1.9" Sony CMOS Sensor		
Pixel	2,120K Pixels		
Resolution	MAX. 1920 x 1080p (30/25FPS)		
Zoom	Optical x36, Digital x32	Optical x30, Digital x32	Optical x12, Digital x32
Video Signal-to-Noise	More than 50 dB		
Focal Length	F1.5 ~ F4.8, f=6mm ~ 216mm	F1.5 ~ F4.3, f=6mm ~ 180mm	F1.5 ~ F1.9, f=7mm ~ 84mm
Angle of View	H : 56.5°(Wide) ~ 2.12°(Tele), V : 33.63°(Wide) ~ 1.19°(Tele)	H : 61.2°(Wide) ~ 2.32°(Tele), V : 35.7°(Wide) ~ 1.31°(Tele)	H : 54.07°(Wide) ~ 4.98°(Tele), V : 32.03°(Wide) ~ 2.8°(Tele)
MIN. Illuminance	DSS Off : 0.15 Lux @ Color, 0.01 Lux @ B/W DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W		
Day & Night	Auto / Day / Night(ICR)		
Focus	Auto / Manual / One-Push		
AE Mode	Auto / Iris / Shutter / Manual		
AGC	On / Off		
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]		
DSS	Off / MAX. x2 ~ x4		
Flickerless	On / Off		
Iris	0 ~ 20		
Brightness	0 ~ 20		
White Balance	Auto / One-Push / Manual / Indoor / Outdoor		
WDR / BLC	Off / WDR / BLC		
HLC	On / Off		
De-Fog	On / Off		
Sharpness	0 ~ 10		
DNR	Auto / Off / Low / Middle / High		
Motion Detection	3 Positions		
Privacy Mask	24 Masks		
OSD Menu	English, Simplified Chinese, Traditional Chinese, Japanese		
Ethernet	Ethernet 10/100 Base-T (RJ-45)		
Video Output	CVBS, 1Vp-p		
Audio I/O	Mono Jack, Line In/Out		
Memory Slot	Micro SD		
Serial Port	RS-485, Pelco-D		
Sensor Input	1 Input, Photo-Coupler Type		
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A		
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F		
Dimension	76(W) x 78(H) x 213(L) [mm] / 3(W) x 3.1(H) x 8.4(L) ["]		
Weight	1.2 Kg / 2.7 lb	1.2 Kg / 2.7 lb	1.05 Kg / 2.3 lb
PoE(Power over Ethernet)	802.3af		
Input Power	DC 12V, 0.8A or PoE		
Network			
System OS	Embedded Linux		
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, HTTP, DHCP, FTP, SMTP, DNS, DDNS		
ONVIF	Version 17.06		
DDNS	Support		
Simultaneous User Access	MAX. 10 Users		
Video Compression Format	H.265, H.264, M-JPEG		
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240		
Video Frame Rate	MAX. 30FPS @ All Resolutions		
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control		
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP		
Audio Compression Format	G.711 u-Law		
Audio Streaming	Two Way		
Web Browser OS	Windows 7, 8, 10		
Web Browser Manager	IE11, Firefox, Safari, Opera		
Web Browser Viewer	IE11 or Higher (Active-X)		
# Specification & Design are subject to change without prior notice.			

Overview

- Low Light HD IP Zoom Box Camera
- 1/1.9" Sony CMOS Sensor
- MAX. 1920 x 1080p (30/25FPS)
- Optical x36, x30, x12 & Digital x32
- DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W
- Day & Night
- De-Fog
- 3 Motion Detection Positions
- 24 Privacy Masks
- 1 Sensor Input & 1 Alarm Output
- RS-485
- PoE
- H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio

Dimension



HSZ-HB30W / 20W / 10W



2MP, 1/3" HD-SDI Zoom Box Camera



Specification

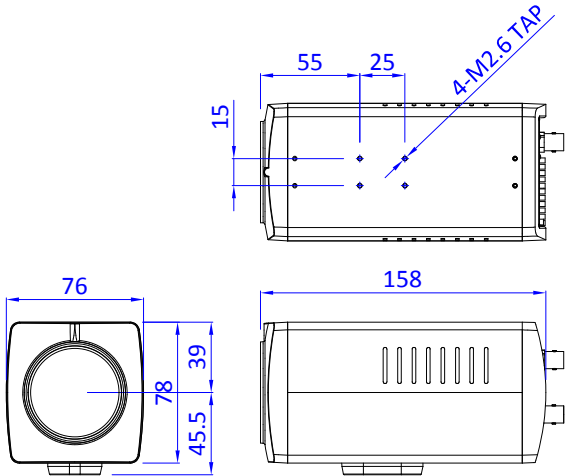
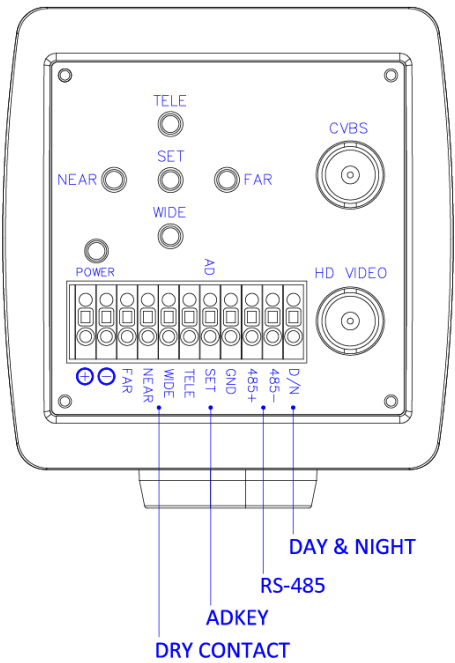
Model	HSZ-HB30W	HSZ-HB20W	HSZ-HB10W
Image Sensor	1/3" Panasonic CMOS Sensor		
Pixel	2,120K Pixels		
Resolution	Digital : 1920 x 1080(p60/p50, p30/p25) Analogue : 700TVL(When WDR is On, CVBS is disabled.)		
Zoom	Optical x30, Digital x32	Optical x20, Digital x32	Optical x10, Digital x32
Video Signal-to-Noise	More than 50 dB		
Focal Length	F1.6 ~ F4.7, f=4.3mm ~ 129mm	F1.6 ~ F3.5, f=4.7mm ~ 94mm	F1.6 ~ F1.8, f=5.1mm ~ 51mm
Angle of View	H : 58.9°(Wide) ~ 2.11°(Tele), V : 45.3°(Wide) ~ 1.61°(Tele)	H : 55.4°(Wide) ~ 2.9°(Tele), V : 32.6°(Wide) ~ 1.6°(Tele)	H : 54°(Wide) ~ 4.9°(Tele), V : 31°(Wide) ~ 4°(Tele)
MIN. Illuminance	DSS Off : 0.5 Lux @ Color, 0.1 Lux @ B/W DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W		
Day & Night	Auto / Day / Night(ICR) / EXT.-IN		
Focus	Auto / Manual / One-Push		
AE Mode	Auto / Iris / Shutter / Manual		
AGC	On / Off		
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]		
DSS	Off / MAX. x2 ~ x4		
Flickerless	On / Off		
Iris	0 ~ 20		
Brightness	0 ~ 20		
White Balance	Auto / One-Push / Manual / Indoor / Outdoor		
WDR / BLC	Off / WDR / BLC		
HLC	On / Off		
De-Fog	On / Off		
Sharpness	0 ~ 10		
DNR	Auto / Off / Low / Middle / High		
Motion Detection	3 Positions		
Privacy Mask	24 Masks		
OSD Menu	English, Simplified Chinese, Traditional Chinese, Japanese		
Video Output	HD : HD-SDI Analogue : CVBS (When WDR is On, CVBS is disabled.)		
Serial Port	RS-485, VISCA/Pelco-D/Pelco-P Protocol		
External Camera Control	Dry Contact, ADKey, RS-485, Day&Night		
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F		
Dimension	76(W) x 78(H) x 158(L) [mm] / 3(W) x 3.1(H) x 6.3(L) ["]		
Weight	950 g / 2.1 lb	950 g / 2.1 lb	820 g / 1.8 lb
Input Power	DC 12V, 0.5A		

Specification & Design are subject to change without prior notice.

Overview

- HD-SDI Zoom Box Camera
- 1/3" Panasonic CMOS Sensor
- 1920 x 1080(p60/50FPS, p30/25FPS)
- Optical x30, x20, x10 & Digital x32
- DSS On : 0.125 Lux @ Color, 0.025 Lux @ B/W
- Day & Night
- De-Fog
- 3 Motion Detection Positions
- 24 Privacy Masks
- Simultaneous HD-SDI & Analogue Video Output
- External Camera Control
 - Dry Contact, ADKey, RS-485, Day&Night

Dimension



HSZ-HB36L / 30L / 12L



2MP, 1/1.9" Low Light HD-SDI Zoom Box Camera



Specification

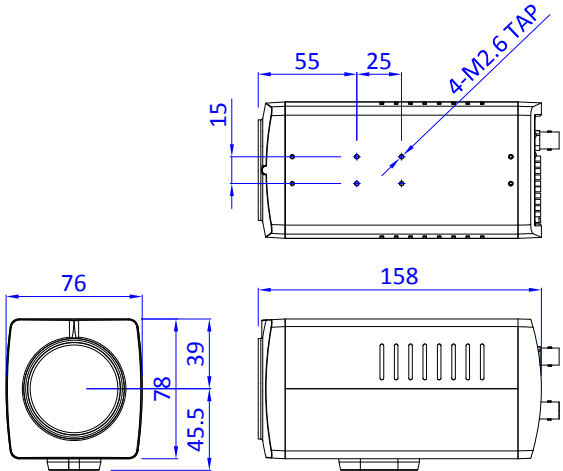
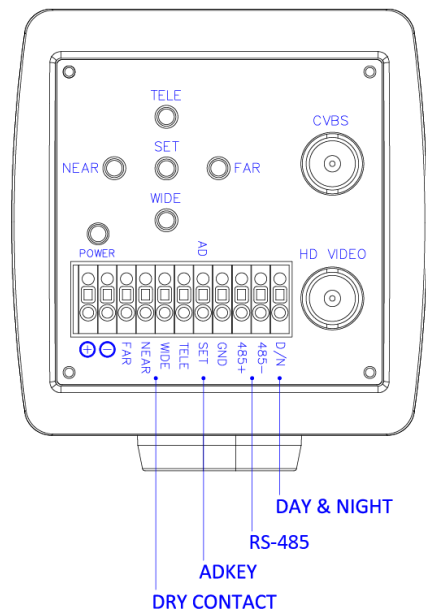
Model	HSZ-HB36L	HSZ-HB30L	HSZ-HB12L
Image Sensor	1/1.9" Sony CMOS Sensor		
Pixel	2,120K Pixels		
Resolution	Digital : 1920 x 1080(p60/p50, p30/p25) Analogue : 700TVL(When WDR is On, CVBS is disabled.)		
Zoom	Optical x36, Digital x32	Optical x30, Digital x32	Optical x12, Digital x32
Video Signal-to-Noise	More than 50 dB		
Focal Length	F1.5 ~ F4.8, f=6mm ~ 216mm	F1.5 ~ F4.3, f=6mm ~ 180mm	F1.5 ~ F1.9, f=7mm ~ 84mm
Angle of View	H : 56.5°(Wide) ~ 2.12°(Tele), V : 33.63°(Wide) ~ 1.19°(Tele)	H : 61.2°(Wide) ~ 2.32°(Tele), V : 35.7°(Wide) ~ 1.31°(Tele)	H : 54.07°(Wide) ~ 4.98°(Tele), V : 32.03°(Wide) ~ 2.8°(Tele)
MIN. Illuminance	DSS Off : 0.15 Lux @ Color, 0.01 Lux @ B/W DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W		
Day & Night	Auto / Day / Night(ICR) / EXT.-IN		
Focus	Auto / Manual / One-Push		
AE Mode	Auto / Iris / Shutter / Manual		
AGC	On / Off		
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]		
DSS	Off / MAX. x2 ~ x4		
Flickerless	On / Off		
Iris	0 ~ 20		
Brightness	0 ~ 20		
White Balance	Auto / One-Push / Manual / Indoor / Outdoor		
WDR / BLC	Off / WDR / BLC		
HLC	On / Off		
De-Fog	On / Off		
Sharpness	0 ~ 10		
DNR	Auto / Off / Low / Middle / High		
Motion Detection	3 Positions		
Privacy Mask	24 Masks		
OSD Menu	English, Simplified Chinese, Traditional Chinese, Japanese		
Video Output	HD : HD-SDI Analogue : CVBS (When WDR is On, CVBS is disabled.)		
Serial Port	RS-485, VISCA/Pelco-D/Pelco-P Protocol		
External Camera Control	Dry Contact, ADKey, RS-485, Day&Night		
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F		
Dimension	76(W) x 78(H) x 158(L) [mm] / 3(W) x 3.1(H) x 6.3(L) ["]		
Weight	1.1 Kg / 2.4 lb	1.1 Kg / 2.4 lb	950 g / 2.1 lb
Input Power	DC 12V, 0.5A		

Specification & Design are subject to change without prior notice.

Overview

- Low Light HD-SDI Zoom Box Camera
- 1/1.9" Sony CMOS Sensor
- 1920 x 1080(p60/50FPS, p30/25FPS)
- Optical x36, x30, x12 & Digital x32
- DSS On : 0.0375 Lux @ Color, 0.002 Lux @ B/W
- Day & Night
- De-Fog
- 3 Motion Detection Positions
- 24 Privacy Masks
- Simultaneous HD-SDI & Analogue Video Output
- External Camera Control
 - Dry Contact, ADKey, RS-485, Day&Night

Dimension





Global Shutter

IP/HD-SDI CAMERA



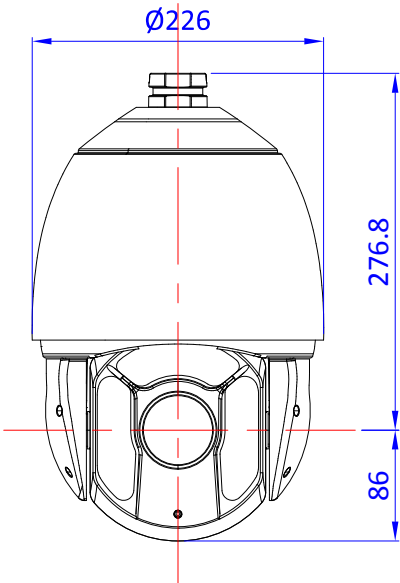
Specification

Model	HIP-AZ236IRWGH
Camera	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor
Pixel	1920(H) x 1080(V)
Zoom	Optical x36, Digital x12
Focal Length	F1.6 ~ F5.3, f=6mm ~ 216mm
Angle of View	H : 60°(Wide) ~ 2°(Tele)
MIN. Illuminance	DSS Off : 0.3 Lux @ Color, 0.04 Lux @ B/W DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
Day & Night	Auto / Day / Night(ICR)
Focus	Auto / Manual
AE Mode	Auto / Iris / Shutter / Manual / Bright
White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC	On / Off
WDR	On / Off
DE-FOG	On / Off
Aperture	Adjustable
Noise Reduction	Yes
Image Stabilization	On / Off
Privacy Mask	8 Masks, Spherical Coordinate
Pan/Tilt Range	Pan : 360°(Endless) / Tilt : -10°~90°
Pan/Tilt Speed	Preset : 240°/SEC. Manual : 0.1°~240°/SEC.(Proportional to Zoom) Swing : 1°~90°/SEC.
Preset	255 Presets
Pattern	4 Patterns [768 Commands(Approximate 5 Minutes)/Pattern]
Auto Pan	1 Auto Pan
Group	8 Groups (MAX. 16 Actions with The Combination of Preset)
Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
Extra Video Output	CVBS 1Vp-p(NTSC or PAL)
Communication	RS-485
Protocol	Pelco-D
OSD	English
Sensor Input	2 Inputs, Photo-Coupler Type
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A
Audio I/O	Mono Jack, Line In/Out
Network Interface	Ethernet 10/100 Base-T (RJ-45)
Memory Slot	Micro SD
IR LED Wave Length	850nm
IR LED Distance	350m
IR LED Brightness	Auto(Proportional to Zoom) / Manual(Off~127)
Illumination Sensor	CDS Sensor
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F
Dimension	226(Ø) x 362.8(H) [mm] / 8.9(Ø) x 14.3(H) [""] / Without a Bracket
Weight	7 kg / 15.5 lb / Without a Bracket
Input Power	DC 12V, 3.5A
Network	
System OS	Embedded Linux
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS
ONVIF	Support
DDNS	Support
Simultaneous User Access	MAX. 10 Users
Video Compression Format	H.265, H.264, M-JPEG
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240
Video Frame Rate	MAX. 30FPS @ All Resolutions
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP
Audio Compression Format	G.711 u-Law
Audio Streaming	Two Way
Web Browser OS	Windows 7, 8, 10
Web Browser Manager	IE11, Firefox, Safari, Opera
Web Browser Viewer	IE11 or Higher (Active-X)
# Specification & Design are subject to change without prior notice.	

Overview

- 2MP Global Shutter HD IP IR PTZ Camera
- 1/1.8" Sony Global Shutter CMOS Sensor
- Optical x36 & Digital x12
- DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
- Day & Night / DE-FOG / Image Stabilization
- 8 Masks with Spherical Coordinate
- The Shortest Path with Vector Drive Technology
- Micro Control(0.1°/SEC.) with Micro Stepping Control Technology
- 255 Presets / 4 Patterns / 1 Auto Pan / 8 Groups
- Simultaneous CVBS Output
- RS-485 for Easy PTZ Control
- 2 Sensor Inputs & 1 Alarm Output
- Intelligent IR LED Control
- IR LED Distance 350m
- Triple Streaming : H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio
- HVE(Hardware Video Enhancer)

Dimension





Ultra Performance
FPGA-based
HVE
(Hardware Video Enhancer)

1) Night Vision Enhancement



OFF



ON

2) De-Fog Enhancement



OFF



ON

Ultra Performance Global Shutter HD IP IR PTZ Camera



Specification

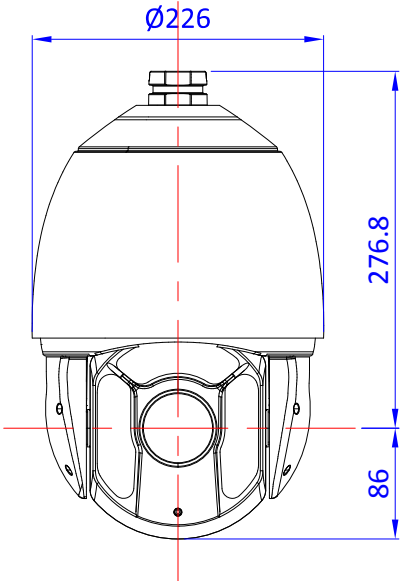
Model	HIP-AZ236IRWG
Camera	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor
Pixel	1920(H) x 1080(V)
Zoom	Optical x36, Digital x12
Focal Length	F1.6 ~ F5.3, f=6mm ~ 216mm
Angle of View	H : 60°(Wide) ~ 2°(Tele)
MIN. Illuminance	DSS Off : 0.3 Lux @ Color, 0.04 Lux @ B/W DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
Day & Night	Auto / Day / Night(ICR)
Focus	Auto / Manual
AE Mode	Auto / Iris / Shutter / Manual / Bright
White Balance	Auto / Indoor / Outdoor / Manual(Red, Blue Gain Adjustable)
BLC	On / Off
WDR	On / Off
DE-FOG	On / Off
Aperture	Adjustable
Noise Reduction	Yes
Image Stabilization	On / Off
Privacy Mask	8 Masks, Spherical Coordinate
Pan/Tilt Range	Pan : 360°(Endless) / Tilt : -10°~90°
Pan/Tilt Speed	Preset : 240°/SEC. Manual : 0.1°~240°/SEC.(Proportional to Zoom) Swing : 1°~90°/SEC.
Preset	255 Presets
Pattern	4 Patterns [768 Commands(Approximate 5 Minutes)/Pattern]
Auto Pan	1 Auto Pan
Group	8 Groups (MAX. 16 Actions with The Combination of Preset)
Other Functions	Auto Flip, Auto Parking, Power-up Action and Others
Extra Video Output	CVBS 1Vp-p(NTSC or PAL)
Communication	RS-485
Protocol	Pelco-D
OSD	English
Sensor Input	2 Inputs, Photo-Coupler Type
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A
Audio I/O	Mono Jack, Line In/Out
Network Interface	Ethernet 10/100 Base-T (RJ-45)
Memory Slot	Micro SD
IR LED Wave Length	850nm
IR LED Distance	350m
IR LED Brightness	Auto(Proportional to Zoom) / Manual(Off~127)
Illumination Sensor	CDS Sensor
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F
Dimension	226(Ø) x 362.8(H) [mm] / 8.9(Ø) x 14.3(H) [""] / Without a Bracket
Weight	7 kg / 15.5 lb / Without a Bracket
Input Power	DC 12V, 3.0A
Network	
System OS	Embedded Linux
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS
ONVIF	Support
DDNS	Support
Simultaneous User Access	MAX. 10 Users
Video Compression Format	H.265, H.264, M-JPEG
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240
Video Frame Rate	MAX. 30FPS @ All Resolutions
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP
Audio Compression Format	G.711 u-Law
Audio Streaming	Two Way
Web Browser OS	Windows 7, 8, 10
Web Browser Manager	IE11, Firefox, Safari, Opera
Web Browser Viewer	IE11 or Higher (Active-X)

Specification & Design are subject to change without prior notice.

Overview

- 2MP Global Shutter HD IP IR PTZ Camera
- 1/1.8" Sony Global Shutter CMOS Sensor
- Optical x36 & Digital x12
- DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
- Day & Night / DE-FOG / Image Stabilization
- 8 Masks with Spherical Coordinate
- The Shortest Path with Vector Drive Technology
- Micro Control(0.1°/SEC.) with Micro Stepping Control Technology
- 255 Presets / 4 Patterns / 1 Auto Pan / 8 Groups
- Extra CVBS Output
- RS-485 for Easy PTZ Control
- 2 Sensor Inputs & 1 Alarm Output
- Intelligent IR LED Control
- IR LED Distance 350m
- Triple Streaming : H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio

Dimension



HIG-CH202VIR/CH204VIR



2M Global Shutter IP IR Housing Camera(Motorized V/F, f=3.6~11mm / f=12~40mm)

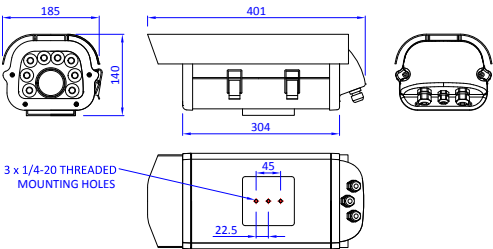


Specification				
Camera	HIG-CH202VIR		HIG-CH204VIR	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor			
Scanning System	Progressive Scan			
Resolution	MAX. 1920 x 1080p (30/25FPS)			
MIN. Illumination	Color : 0.5 Lux, B/W : 0.1 Lux, DSS Color : 0.002 Lux, B/W : 0.001 Lux 0 Lux @ IR Mode			
Lens	Motorized V/F, f=3.6~11m		Motorized V/F, f=12~40mm	
S/N Ratio	More than 55dB			
White Balance	AWB / Manual / Push / AWB-EXT (Manual : RED Gain/BLUE Gain Adjustable)			
Day & Night	Auto(CDS) / Day / Night			
Image Mode	Sharpness / Color Gain / DIS / Gamma			
Image Flip	Off / H / V / H-V Flip			
Image Shading	On / Off			
Image Gamma	LCD / CRT / User[0.45 to 0.75]			
Backlight	Off / BLC / WDR / HLC			
DNR	Low / Middle / High			
Intelligent Motion Detection	On / Off			
De-Fog	Off / 1 ~ 3			
IR Strobe Signal	Shutter Strobe			
Digital Zoom	x32			
AE Mode	Auto(Normal/Deblur) / Manual / Flickerless			
AGC Limit	0 ~ 10			
Shutter Speed	1/30, 1/60, 1/100, 1/120, 1/250, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000			
Digital Slow Shutter	Off / x2 to x32			
Network Interface	Ethernet 10/100 Base-T(RJ-45)			
IR LED	8 High Power LEDs			
IP Rate	IP66			
Operation Temperature	-20℃ ~ 60℃ / -4°F ~ 140°F			
Dimension	185(W) x 140(H) x 401(L) [mm] / 7.3(W) x 5.5(H) x 15.8(L) ["]			
Weight	3 Kg / 6.6 lb			
Input Power	DC 12V, 3.2A			
Network				
System OS	Embedded Linux			
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS			
ONVIF	Support			
DDNS	Support			
Simultaneous User Access	MAX. 10 Users			
Video Compression Format	H.265, H.264, M-JPEG			
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240			
Video Frame Rate	MAX. 30FPS @ All Resolutions			
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control			
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP			
Audio Compression Format	G.711 u-Law			
Audio Streaming	Two Way			
Web Browser OS	Windows 7, 8, 10			
Web Browser Manager	IE11, Firefox, Safari, Opera			
Web Browser Viewer	IE11 or Higher (Active-X)			
# Specification & Design are subject to change without prior notice.				

Overview

- 1/1.8" Type Sony Global Shutter CMOS Sensor
- MAX. 1920x1080p(30/25FPS)
- 0 Lux @ IR Mode
- Motorized V/F, f=3.6~11mm / f=12~40mm
- More than 55dB
- Day & Night
- BLC / WDR / HLC
- DNR
- Intelligence Motion Detection
- De-Fog
- Shutter Strobe
- Digital x32 Zoom
- Ethernet Network Interface
- 8 High Power LEDs
- IP 66

Dimension



HSG-CH202VIR/CH204VIR



2M **Global Shutter** HD-SDI IR Housing Camera(Motorized V/F, f=3.6~11mm/f=12~40mm)

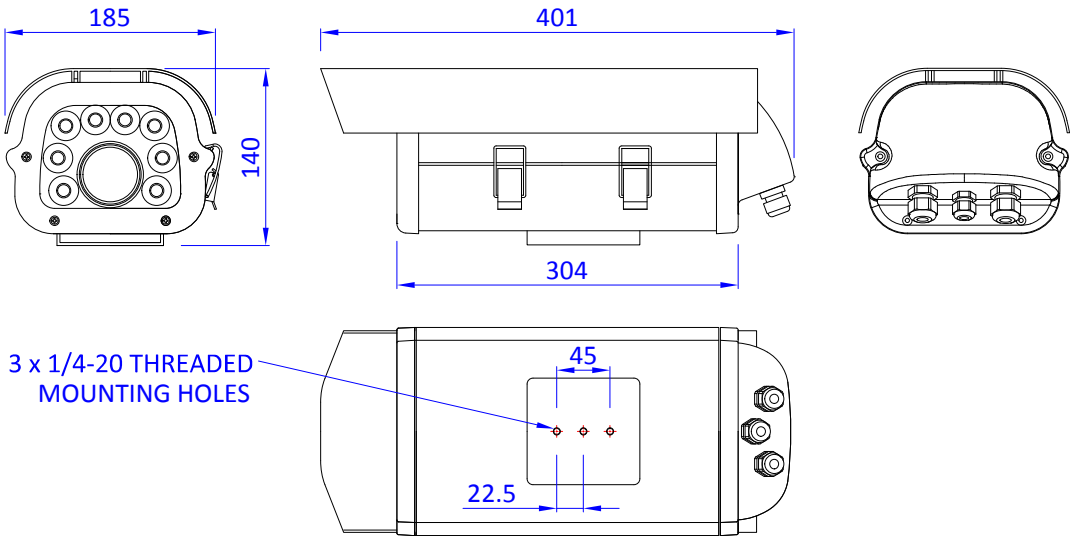


Specification				
Camera	HSG-CH202VIR		HSG-CH204VIR	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor			
Scanning System	Progressive Scan			
Resolution	MAX. 1920 x 1080p (60/50FPS)			
MIN. Illumination	Color : 0.5 Lux, B/W : 0.1 Lux, DSS Color : 0.002 Lux, B/W : 0.001 Lux 0 Lux @ IR Mode			
Lens	Motorized V/F, f=3.6~11mm		Motorized V/F, f=12~40mm	
S/N Ratio	More than 55dB			
White Balance	AWB / Manual / Push / AWB-EXT (Manual : RED Gain/BLUE Gain Adjustable)			
Day & Night	Auto(CDS) / Day / Night			
Image Mode	Sharpness / Color Gain / DIS / Gamma			
Image Flip	Off / H / V / H-V Flip			
Image Shading	On / Off			
Image Gamma	LCD / CRT / User[0.45 to 0.75]			
Backlight	Off / BLC / WDR / HLC			
DNR	Low / Middle / High			
Intelligent Motion Detection	On / Off			
De-Fog	Off / 1 ~ 3			
IR Strobe Signal	Shutter Strobe			
Digital Zoom	x32			
AE Mode	Auto(Normal/Deblur) / Manual / Flickerless			
AGC Limit	0 ~ 10			
Shutter Speed	1/30, 1/60, 1/100, 1/120, 1/250, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000			
Digital Slow Shutter	Off / x2 to x32			
Video Output	HD-SDI			
IR LED	8 High Power LEDs			
IP Rate	IP66			
Operation Temperature	-20°C ~ 60°C / -4°F ~ 140°F			
Dimension	185(W) x 140(H) x 401(L) [mm] / 7.3(W) x 5.5(H) x 15.8(L) ["]			
Weight	3 Kg / 6.6 lb			
Input Power	DC 12V, 3.0A			
# Specification & Design are subject to change without prior notice.				

Overview

- 1/1.8" Type Sony **Global Shutter** CMOS Sensor
- MAX. 1920x1080p(60/50FPS)
- 0 Lux @ IR Mode
- Motorized V/F, f=3.6~11mm / f=12~40mm
- More than 55dB
- Day & Night
- BLC / WDR / HLC
- DNR
- Intelligence Motion Detection
- De-Fog
- Shutter Strobe
- Digital x32 Zoom
- HD-SDI Output
- 8 High Power LEDs
- IP 66

Dimension





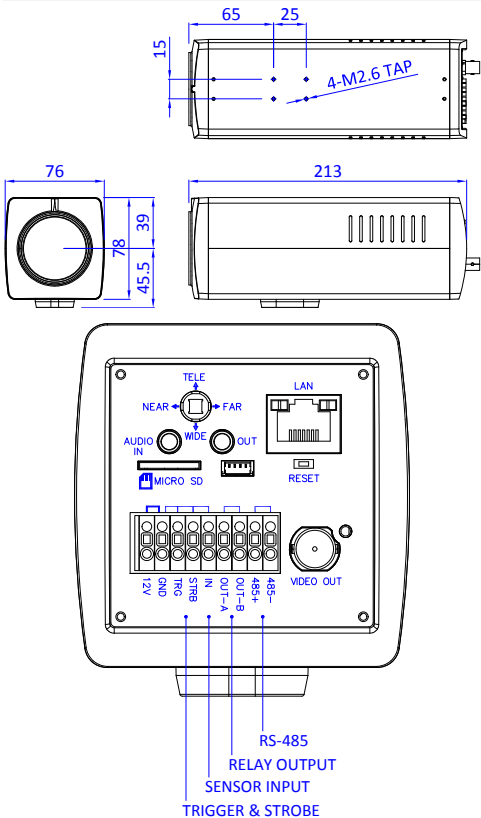
Specification

Camera	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor
Pixel	1920(H) x 1080(V)
Resolution	MAX. 1920 x 1080p (30/25FPS)
Zoom	Optical x36, Digital x12
Focal Length	F1.6 ~ F5.3, f=6mm ~ 216mm
Angle of View	H : 60°(Wide) ~ 2°(Tele)
MIN. Illuminance	DSS Off : 0.3 Lux @ Color, 0.04 Lux @ B/W DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
Day & Night	Auto / Day / Night(ICR)
Focus	Auto / Manual / One-Push
AE Mode	Auto / Iris / Shutter / Bright / Manual
Manual Gain	0 ~ 100
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]
DSS	Off / MAX. x2 ~ x32
Iris	0 ~ 100
Brightness	0 ~ 100
White Balance	AWB / ATW Indoor / ATW Outdoor / Manual / Push / Anti-Rolling
Backlight	Off / WDR / BLC / HLC
De-Fog	0 ~ 3
Sharpness	0 ~ 100
DNR	0 ~ 5
Motion Detection	4 Positions
Privacy Mask	8 Masks
OSD Menu	English
Ethernet	Ethernet 10/100 Base-T (RJ-45)
Video Output	CVBS, 1Vp-p (When WDR is On, CVBS is disabled)
Audio I/O	Mono Jack, Line In/Out
Memory Slot	Micro SD
Serial Port	RS-485, Pelco-D
Sensor Input	1 Input, Photo-Coupler Type
Alarm Output	1 Output, Relay Output, MAX. Load DC 24V, 1A / AC 125V, 0.5A
External Trigger	External Trigger Input, Strobe Output
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F
Dimension	76(W) x 78(H) x 213(L) [mm] / 3(W) x 3.1(H) x 8.4(L) ["]
Weight	1.2 Kg / 2.7 lb
PoE(Power over Ethernet)	802.3af
Input Power	DC 12V, 0.8A or PoE
Network	
System OS	Embedded Linux
Protocol	TCP/IP, UDP/IP, RTP, RTSP, RTCP, NTP, HTTP, DHCP, FTP, SMTP, DNS, DDNS
ONVIF	Version 17.06
DDNS	Support
Simultaneous User Access	MAX. 10 Users
Video Compression Format	H.265, H.264, M-JPEG
Video Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 640x480, 320x240
Video Frame Rate	MAX. 30FPS @ All Resolutions
Video Quality Control	H.265 & H.264 : Bitrate Control / M-JPEG : Quality Level Control
Video Streaming	Triple Stream (Stream 1, 2, 3), RTP/RTSP, Unicast RTP, Multicast RTP
Audio Compression Format	G.711 u-Law
Audio Streaming	Two Way
Web Browser OS	Windows 7, 8, 10
Web Browser Manager	IE11, Firefox, Safari, Opera
Web Browser Viewer	IE11 or Higher (Active-X)
# Specification & Design are subject to change without prior notice.	

Overview

- Global Shutter HD IP Zoom Box Camera
- 1/1.8" Sony Global Shutter CMOS Sensor
- MAX. 1920 x 1080p (30/25FPS)
- Optical x36, Digital x12
- DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
- Day & Night
- De-Fog
- 4 Motion Detection Positions
- 8 Privacy Masks
- 1 Sensor Input & 1 Alarm Output
- RS-485
- External Trigger Input & Strobe Output
- PoE
- H.265, H.264, M-JPEG
- MAX. 30FPS @ All Resolutions
- Two Way Audio

Dimension



2MP, X36, 1/1.8" **Global Shutter HD-SDI** Zoom Box Camera



Specification	
Image Sensor	1/1.8" Sony Global Shutter CMOS Sensor
Pixel	1920(H) x 1080(V)
Resolution	Digital : 1920 x 1080(30/25FPS) Analogue : 700TVL(When WDR is On, CVBS is disabled.)
Zoom	Optical x36, Digital x12
Focal Length	F1.6 ~ F5.3, f=6mm ~ 216mm
Angle of View	H : 60°(Wide) ~ 2°(Tele)
MIN. Illuminance	DSS Off : 0.3 Lux @ Color, 0.04 Lux @ B/W DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
Day & Night	Auto / Day / Night(ICR) / EXT.-IN
Focus	Auto / Manual / One-Push
AE Mode	Auto / Iris / Shutter / Bright / Manual
Manual Gain	0 ~ 100
Shutter Speed	1/30(25) ~ 1/30,000 [SEC.]
DSS	Off / MAX. x2 ~ x32
Iris	0 ~ 100
Brightness	0 ~ 100
White Balance	AWB / ATW Indoor / ATW Outdoor / Manual / Push / Anti-Rolling
Backlight	Off / WDR / BLC / HLC
De-Fog	0 ~ 3
Sharpness	0 ~ 100
DNR	0 ~ 5
Motion Detection	4 Positions
Privacy Mask	8 Masks
OSD Menu	English
Video Output	HD : HD-SDI Analogue : CVBS (When WDR is On, CVBS is disabled.)
External Trigger	External Trigger Input, Strobe Output
Serial Port	RS-485, VISCA/Pelco-D/Pelco-P Protocol
External Camera Control	Dry Contact, ADKey, RS-485
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F
Dimension	76(W) x 78(H) x 158(L) [mm] / 3.1(W) x 3.1(H) x 6.3(L) ["]
Weight	1.1 Kg / 2.5 lb
Input Power	DC 12V, 0.5A
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- Overview
- Global Shutter HD-SDI Zoom Box Camera
 - 1/1.8" Sony Global Shutter CMOS Sensor
 - 1920 x 1080(30/25FPS)
 - Optical x36, Digital x12
 - DSS On (x4) : 0.075 Lux @ Color, 0.01 Lux @ B/W
 - Day & Night
 - De-Fog
 - 4 Motion Detection Positions
 - 8 Privacy Masks
 - Simultaneous HD-SDI & Analogue Video Output
 - External Trigger Input & Strobe Output
 - External Camera Control
 - Dry Contact, ADKey, RS-485

