

EX1000HD

Intelligent Long Range Laser Pan Tilt Camera

EX1000HD Series of HD IP Long Range PTZ Cameras are specially designed for outdoor with intelligent PTZ features.

With ultra sensitive CMOS sensors with various zoom ratio optical modules, images with the highest picture qualities are possible. With hardened casing and high precision engineering, these cameras can operate in the most extreme conditions including under high humidity and wet weather.

EX1000HD Series of HD IP Long Range PTZ Cameras will provide quality and stability to set the industry's standard for high performance HD IP PTZ dome cameras.

















Key Features

High Definition Picture Quality: 4K, 3MP, 1080P, 720P

High Zoom Ratio Lens: 20X, 30X

High Speed Smooth Pan Tilt System: Horizontal 360 Degrees Continuous Rotation, Vertical 120 Degrees

Temperature Control System: Operating Temperature -40°C to +60°C

Various New Selection: Intelligent Adaptive Laser Illumination, Auto Day Night Transition, Image Stabilizer, WDR

Various Video Analytics: Motion Tracking, Object Left Behind, Traffic Violations, Auto Tracking, Counting, Illegal Line Crossing

High Precision Mechanical Design



High Definition Optical Glass from Switzerland, complete with Double Sided Coating prevents water seepage and increases light penetration of up to an additional +5%. This latest optical glass is also dust and water moisture resistant.



Waterproof Shaft and Oil Seal with special Stainless Steel structure will improve water resistance. This will allow cameras to achieve up to IP67 industrial standards.



Using High Precision Bearings, we can ensure both smooth and high precision mechanical rotation of our speed domes.



Uniquely designed Hardened Metal Alloy casing is suitable for extreme weather conditions. Tilt angle is up to +30 degrees and down angle is up to -90 degrees. This greatly increases the camera's monitoring areas and overcomes the usual limited viewing angles of ordinary speed domes.



This allows Pressure Equalization internally and externally. This will not only protect the internal sensitive sensors and optical block but at the same time, reduce moisture build up inside the dome glass casing



Stainless Steel High Precision Ball Bearing Assembly prolongs camera life as well as prevent corrosion.

High Precision Stepping Motors and Gears ensure Smooth Movement, Stability, Precision and Low Noise.



Image Enhancement Functions



Normal WDR













Intelligent Laser Illumination: According to various zoom ratio, the laser will be synchronized with different angle illumination. This will satisfy various low light environment monitoring.

Adaptive Laser Illumination Distance: Up to 500 Meters

Day Night Switching Function: IR-Cut

Guard Tour Presets: Predefine 4 zones. When a defined zone detects motion, camera will automatically move to that respective area for the defined dwell period and then return to home position.

Preset Time Task Activation: For 7 days a week, set up to 8 periods of specific task movements. Automatically set up these task movements.

Image Stabilizer Function: Under slight moving conditions of the camera, this function will stabilize picture for quality recording of video.

Video Analytics

License Plate Recognition
Car Model Recognition







Traffic Violations



Smoke Detection



Facial Recognition





Auto Tracking, Illegal Line Crossing and Illegal or Abnormal Movement and Assembly.

Flexible Combinations

Signal Output

IP HD-SDI CVBS WiFi 4G Installation Methods

Wall Mount

Pole Mount

Hoisting Installation

Wall Corner Mount



Mechanical Specification

Dan / Tilt Angla	Horizontal: ±360 degrees continous pan (Highest Speed: 220 degrees / sec)					
Pan / Tilt Angle	Vertical: +30degrees to -90 degrees (Max Speed:160 degrees/sec)					
Preset Position	255 (Speed: 300 degrees/sec)					
Home Position	Support					
Cruise	Can support up to 8 different path movements					
Environmental	IP67					
Adaptive Laser	According to various zoom ratio, the laser will be synchronized with different angle illumination.					
Illuminator	This will satisfy various low light environment monitoring. Adaptive laser illumination distance is up to 300 ~ 500 Meters.					
Operating Temperature	-40 °C to +60 °C					
Operating Humidity	100% Suitable for Use					
Power Input	AC24V (POE: Optional)					
Power Consumption	10W (Close Laser Beams) 30W (Open Laser Beams)					
Dimension	Ф183×424mm					
Weight	11.5KG					

Camera Specification

-	20X S	20X B	30	X	20X Starlight	30X / 3MP	
Image Sensor	1/2.8" CMOS 2.38MP	1/2.8" CMOS 2MP	1/2.8" CMOS 2.38MP	1/2.8" CMOS 2MP	1/1.9" CMOS 2MP	1/2.8" CMOS 3MP	
Lens	4.7~94mm	4.7~94mm	4.3 ~ 129mm	5 ~ 150mm	6.8~136mm	4.5~135mm	
Horizontal Angle of View	59.5°(W)~3.3°(T)	62°(W)~3.1°(T)	63.7°(W)~2.3°(T)	62.9°(W)~2.3°(T)	69°(W)~4.1°(T)	61.5°(W)~2.1°(T)	
Aperature	F1.6(W)~F3.5(T)	F1.6(W)~F3.3(T)	F1.6(W)~F4.7(T)	F1.6(W)~F4.8(T)	F1.6 (W)~F3.4 (T)	F1.6(W)~F4.8(T)	
Min. Illumination	0.05 lux (F1.6, Color) 0.001 lux (F1.6, B/W)	0.025 lux (F1.6, Color) 0.0025 lux (F1.6, B/W)	0.19 lux (F1.6, Color) 0.02 lux (F1.6, B/W)	0.025 lux (F1.6, Color) 0.0025 lux (F1.6, B/W)	0.003 lux (F1.6, Color) 0.0011 lux (F1.6, B/W)	0.03 lux (F1.6, Color) 0.01 lux (F1.6, B/W)	
Shutter Speed	1/1~1/10000s	1/6~1/8000s	1/1~1/10000s	1/6~1/8000s	1/6~1/8000s	1/6~1/8000s	
Resolution	1080P60,1080P50,1080P30, 1080P25,1080i60,1080i50, 720P30,720P25	1080P30,1080P25, 720P30,720P25	1080P60,1080P50,1080P30, 1080P25,1080i60,1080i50, 720P30,720P25	1080P30,1080P25, 720P30,720P25	1080P30,1080P25, 720P30,720P25	1080P30,1080P25, 720P30,720P25	
Focus	Auto、 Push						
White Balance	Auto、 Manual						
Exposure	Auto、Manual、Shutter、Iris、Indoor 50HZ、Indoor 60HZ						
Day / Night	Support						
BLC	Support						
WDR	Support						
Defog	Support						
Noise Reduction	2D/3D						
S/N Ratio	≥50db						

IP Specification

Video Compression	MJPEG、H.264 High Profile				
Frame Rate	1080P (1920*1080) MAX:60 FPS、720P(1280*720) MAX:30 FPS、D1(720*576) MAX:25 FPS				
Protocols	IPv4、IGMP、ICMP、ARP、TCP、UDP、DHCP、PPPoE、RTP、RTSP、QoS、DNS、DDNS、NTP、FTP、UPnP、HTTP、SNMP、SIP、GB/T28181、ONVIF IP Auto Adaptations, Effective monitoring even under data loss environment				
Multi-stream	3 data stream function will satisfy various bandwith, frame rates and storage requirements in real time				
Audio Compression	AAC-LC Broadband Audio EncodingAudio Quality				
Special Function	UNP Technique, resolve Private Network NAT throughput, support movement testing, audio testing, various intelligent functions.				
OSD	Customized OSD, Support Side Hook and Artistic Font				
Storage	Support 32GB Local Storage (Optional)				

HD-SDI Signal and Control

HD-SDI	Signal Fluctuations 800mv -/+10% (external cable extension requirements 75-5, 128 twisted pair shielding, coaxial cable)
Signal Format	1080P60、1080P50、1080P30、1080P25、1080i60、1080i50、720P60、720P50、720P30、720P25
Control Protocol	Pelco RS-485



Ordering Information

BLC-EX1020HD-L5S BLC-EX1030HD-L5S (HD-SDI Signal)

BLC-EX1020HD-L5SN BLC-EX1030HD-L5SN (HD-SDI + IP Signal)

BLC-EX1020HD-L5N BLC-EX1030HD-L5N (IP Signal)

BLC-EX1020HD-L5NXG 20X Starlight Low Illumination camera using large 1.9 inch high sensitivity CMOS sensor with

customized large aperature zoom lens. This allows the camera to achieve high sensitivity even under

low light conditions to monitor and record high quality images.

BLC-EX1030HD3M-L5N 30X 3MP Ultra Low Light camera using the latest new generation high sensitivity 3MP

CMOS sensors. Picture quality is up to 2048 x 1536 resolution. Low light condition recordings

are greatly improved when compared to traditional cameras.

Installation Diagram

