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APPLICATION
Petroleum/Military/Electric Power/Colliery



Explosion Proof Surveillance

Product
Manual

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Shenzhen Enerson Technology Co., Ltd.

C Company Profile:



SHENZHEN ENERSON TECHNOLOGY CO.,LTD

is a high-technology enterprise specializing in development, manufacture and distribution of Explosion-proof Surveillance products, we have a high reputation in light industry quality and product promotion as China's security product industry association.

All products of the company were developed, designed and produced by ourself. Our products are widely used in petroleum, chemical, military, aerospace, marine, transportation and other areas, and we strive to meet various needs of customers with our Continuous innovation breakthrough.


















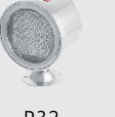







Company main production include explosion-proof surveillance camera(plant&mining area), Special environment surveillance camera(High temperature & low temperature), Infrared night vision explosion-proof camera, total with more than 40 kinds of products.

All the above products have been Certified by National anti-explosive electric products quality supervision and inspection center. Such as national standard GB3836-2008 production standards certifications, qualification certification and production license products, quality management, environmental assessment certificates and patent certificates and so on.

Heli have a high-quality R&D team with a set of advanced equipment and many professional technicians, more than 10 doctors and professors, The company have advanced development complete equipment, instruments, precision machining equipment and testing equipment, including lathes, milling machines, boring machines, pressure detector and so on.

We adhere to the unique enterprise culture, based on "strict in management and strict in production, strict in delivery " management requirements and pragmatic innovation, integrity and excellence in the spirit of enterprise, constantly seeking professional employee to make the company be full of vitality and competitiveness, and gain gratifying achievements both in technology and sales. Meantime we insist on the best quality, reasonable price and excellent services to return our customers. we firmly believe our brand will be indispensable in China's CCTV explosion industrial Surveillance!

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						EX-Proof Phone/Ex-Proof Monitor HL-E8013 Ex-Proof Phone HL-E8014 Ex-Proof Monitor Ex-Proof Pickup HL-YXSYQ-5
						Ex-Proof Junction Box HL-Ex80 Housing HL-E913HF HL-E913HS HL-E600H HL-E212H HL-E113H

Project Cases:



Beijing Quan Cheng Jiankong Gongcheng
 China's oil and natural gas transportation company
 Shanghai Puyu Kuangshan Shebei Company Ltd. (Tianzhu Coal Mine Number three)
 Yunnan Grid Company Yuxi Administration of Power Supply
 Ningbo Open Economic Zone Baowuzi Company (Baijiang Substation)
 Datang Harbin Number One thermoelectricity Company Ltd.
 Inner Mongolia Shuangxin Huanbao Cailixo Company



Chongqing Kaixian Coal Mine
 Chengdu Ya' an Coal Mine
 12.27 Dalian International Reserve Project
 Shenhua group
 Shanxi baiyangling mine



Shanxi Baiyangling Coal Mine
 Daqing yichang combination station
 Daqing Yichang Union Station
 Lubei power generating company
 Lubei Power Company



China Petroleum and Chemical Corporation
 CNPC Zhenlianhua Branch office
 Yuanping city CNG gas station
 Yuanping city natural gas CNG



Xinjiang yilite, coal chemical industry co., LTD. 950000 tons of coking projects



Ningxia kaiyuanfengyou chemical corporation
 CCPP-CDQ project
 Nilekerui coking project
 Kelamayirun oil plant

Project Cases:



Inner Mongolia wushenqitaoli town changqin Oil gas recovery
 Weifanghongrun petrochemical
 Inner Mongolia tianye group
 Huabei Oil field & changtang sea Oil field
 Daqing Oil field



Hegangjunde Coal mine
 Shanxi fenxi mining
 Tianjing yongfuguanxi Co. Ltd
 Tianjing binhailang oil
 Pangjin city liaohe oil field
 Tengzhou caozhuang Coal Mine



Chongqing kaixian Coal Mine
 Chengdu yaan Coal Mine
 Guizhou liupanshui Coal Mine
 Guizhou xishuituanjie coal mine
 Guizhou bijie coal mine
 Guizhou hezhang Co. Ltd



Yiming hedong mine Co. Ltd
 Shanxi pulongwan mine Co. Ltd
 Wuhai mine coking safe information system



Shanxi baiyanglin coal mine
 Hedong CCTV system coal mine project



Chengdu guanguan Coal mine
 Anhui huaibei zouzhou coal mine
 Hebei fengfeng coal mine
 Shanxi suzhou houan coal mine

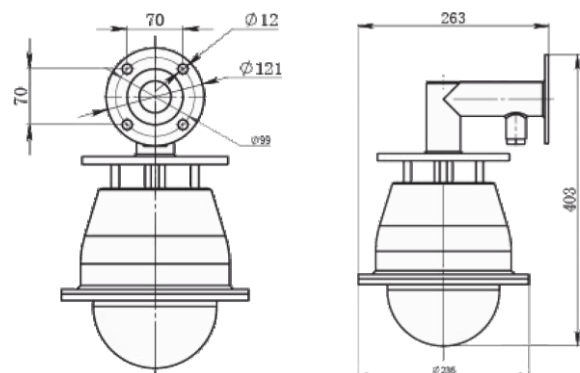
HL-E9001



Optional accessories



Installation Diagram



EX-proof High Speed Dome Camera

Won the national explosion-proof electrical product quality sophisticated design exclusive production.

HL-E9001 combines the advantages of the traditional explosion-proof monitoring devices and intelligent ptz camera, Its with advanced performance and easy to use, increased the flexibility of industrial monitoring system. can be widely used in petroleum, chemical industry, mining, Port, Jetty, weapon industry, food supplies and other places.

Chinese menu, camera name and angles display, watch dog automatically scanning, interval scanning line scan pattern. Built-in lightning protection circuit, three automatic scanning. A straight line scanning, speed can be set, built-in lightning protection circuit, one automatic inspection, one limit scan. Housing is made of stainless steel. Multiple control protocols, speeds could up to 300°/s or more, 120° vertical rotation range, protection grade IP68, can be ceiling mounted indoor and outdoor.

Products specification

Mddel number	HL-E9001 EX-proof High Speed Dome Camera
Ex-marking	ExdIICT6/DIP A20 TA, T6
Certificattion	CNEx10.1378X
Material	Stainless steel 304 or 316L
IP Grade	IP68
Outlet hole quantity/specification	1pc×M20x1.5
Installation	Wall mounted bracket
Horizontal rotation range	360° continuous rotation
Vertical rotation range	0°~90°
Horizontal rotation speed	0.1°/S~300°/S
Vertical rotation speed	0.1°/S~240°/S
Outside dimension	7 inch
Preset position	256
Surface treatment	Stainless steel surface gloss
Weight	10kg
Input voltage	24VAC
Preset position precision	≤0.1°
Electronic current/power	<2A/<40w
Camera	Sony/Samsung/LG optional
Environment Temperature	-30°C~+60°C
Transmission mode	RS-485, multiple, adjustable
Electronical connection	Multi-core integrated cabling, power, control, video signal
Special features	Camera name and angles display, watch dog automatically scanning, interval scanning line scan pattern
Compatible cameras chipset	Sony
Air pressure	80~106KPa
Humidity	95% RH (+25°C)
Pitching rotation range	±45°
Pitching rotation speed	0~90°/S
Communication rate	Multi-, to be set
Communication protocol	Multi-, to be set

HL-E9001

Network HD High Speed Dome Camera



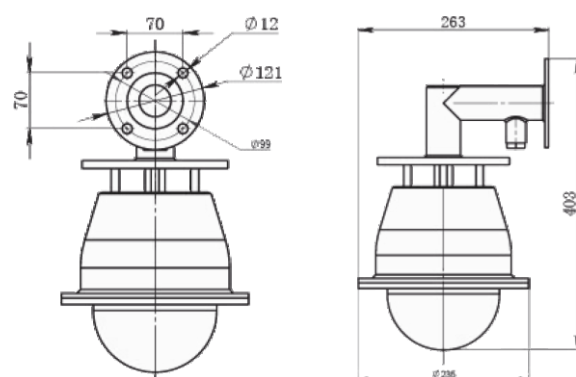
Won the national explosion-proof electrical product quality sophisticated design exclusive production.

HL-E9001 Ex-proof network High Speed Dome Camera is an advanced Ex-proof monitoring equipment, it combines the advantages of the traditional explosion-proof monitoring devices and intelligent ptz camera, Substantially increased the Ex-proof monitoring device' function and usability. It is designed to meet the IIC gases group(for example, Hydrogen, acetylene, ethylene, coke oven gas, dimethyl ether) and combustible dust and other very special environmental's requirements. It's Explosion-proof performance comply with GB3836.1-2010, GB3836.2-2010's requirements. Its manufacturing comply with the regulations of IEC60079, IEC21641, GB3836-2010 and GB12476.1-2010; The internal structure of the ptz is highly integrated, simple circuit design, little heat dissipating capacity, conducive to the camera's operation under high temperature. it comes with the function of fast track, 360° rotation, automatic flip, pattern scanning, mode path and on-screen menus. Digital HD 2.0Megapixel signal output, this ptz camera have strong function, high cost performance, easy to use and to install.

Optional accessories



Installation Diagram



Products specification

Mdel number	HL-E9001 network HD high speed dome camera	
Ex-marking	ExdIICT6	
IP Grade	IP68	
Camera		
Image sensor	1/3", 1.3 Mega CMOS Sensor	1/2.9", 2.43 Mega CMOS Sensor
Total pixels	1.3 megapixel	About 2.1 megapixel
TV line	720p	1080p
Video format	1280×720/25/30/50/60p	1920×1080/25/30; 1280×720/25/30
Minimum illumination	0.3 LUX	0.3LUX
SNR	>45dB	>45dB
White Balance	Automatic, indoor and outdoor, manual, automatic tracking	Automatic, indoor and outdoor, manual, automatic tracking
WDR	DWDR	DWDR
DNR	2D	2D
Electronic Shutter	1/50~1/10000s	1/50~1/10000s
Lens		
Focus	5.6mm~100.8mm	4.7mm~94mm
Optical magnification	18x	20x
Aperture value	F1.6	F1.6
Viewing angleHorizontal	48.3 °~3.1°	Horizontal 54.8 °~3.4°
Max frame rate	720p 25fps	F1080Pp 25fps
Video Resolution	1280×720(720p), 720×576(D1), 352×288(CIF)	1920×1280(1080p), 720×576(D1), 352×288(CIF)
Stream Type	720P/D1/CIF optional	1080P/D1/CIF optional
Video compression rate	16Kbps~8Mbps	
Image delay	<200 Ms	
Network interface	RJ45	
Network protocol	RTSP/RTP/RTCP/HTTP/HTTPS/DHCP/MUDP/FTP/SMTP/CIFS/UPNP/PPPOE /DDNS/NTP	
Triggering conditions	Video motion detection or video loss	
Motion detection	Adjustable sensitivity 1~100, Linkage alarm configurable	
Video loss	Adjustable sensitivity 1~100, Linkage alarm configurable	
Alarm Interface	1ch alarm in, 1ch alarm out	
General Specifications		
Power supply	DC12V±10%(2A)	
Max power consumption	18W(include heater)	
Working environment	Temperature -25~60°C, Humidity ≤ 95%(No condensation)	
Weight	10kg	

HL-E9001S

Ex-proof Uniform Speed Dome Camera



Won the national explosion-proof electrical product quality sophisticated design exclusive production.

HL-E9001S Ex-proof Uniform Speed Dome Camera is an advanced Ex-proof monitoring equipment, it combines the advantages of the traditional explosion-proof monitoring devices and intelligent ptz camera, Substantially increased the Ex-proof monitoring device' function and usability. The product can be used independently, achieve the purpose of monitoring the site of the Inflammable and explosive gases environment.

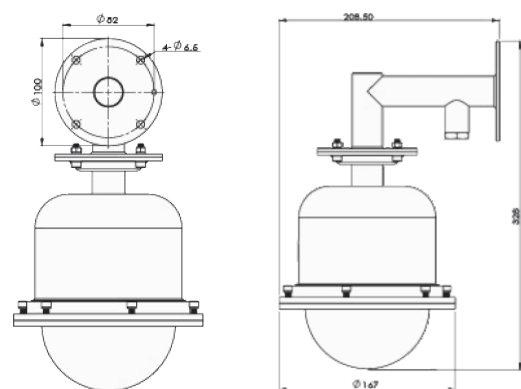
HL-E9001S Camera support continuous rotation 360°on horizontal direction, straight rotation 0°~90 °on vertical direction, when manually operated, rotation speed 0.1°/s, could easily track the fast-moving objects, Perfect function, language menus, it could make detailed planning to account, alarm, scanning and other functions, Support multiple communication protocols and communication rate, could respond to a variety of host commands. the outer surface is polished treated, beautiful and practical. The device could work stably and long time under the temperature of -30°~+60°.

Mounting mode include wall mounted, ceiling mounted and hoisting mounted for both indoor and outdoor.

Optional accessories



Installation Diagram



Products specification

Mdel number	HL-E9001S EX-proof Speed Dome Camera
Ex-marking	ExdIICT6/DIP A20 TA, T6
Certificattion	CNEx10.1387X
Material	Stainless steel 304 or 316L
IP Grade	IP68
Outlet hole quantity/specification	1pc×M20x1.5
Installation	Wall mounted bracket
Horizontal rotation range	360° continuous rotation
Vertical rotation range	0°~90°
Horizontal rotation speed	0.5°/S~50°/S
Vertical rotation speed	0.5°/S~30°/S
Outside dimension	4.5inch
Preset position	200
Surface treatment	Stainless steel surface gloss
Weight	4kg
Input voltage	12VAC
Preset position precision	≤0.1°
Electronic current/power	<2A/<30w
Camera	Samsung 10X zoom camera
Environment Temperature	-30°C~+60°C
Transmission mode	RS-485, multiple, adjustable
Electronical connection	Multi-core integrated cabling, power , control, video signal
Special features	Built-in high voltage and lightning protection circuit, 3 automatic scanning, 1 automatic scanning lines, speed adjustable
Preset rotation speed	400°/S
Atmospheric pressure	80KPa~106 KPa
Relative Humidity	≤90% RH(25°)
Pitching rotation angle	±45°
Pitching rotation speed	0~90°/S

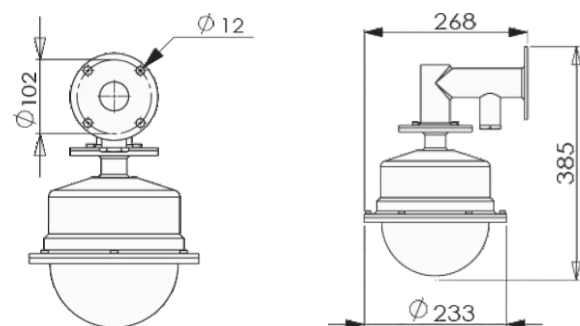
HL-E9001S



Optional accessories



Installation Diagram



Network HD SPEED DOME

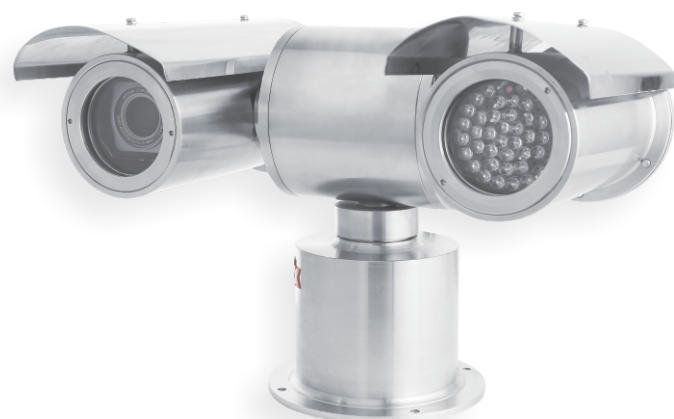
HL-E9001S Ex-proof network Speed Dome Camera is an advanced Ex-proof monitoring equipment, it combines the advantages of the traditional explosion-proof monitoring devices and intelligent ptz camera, Substantially increased the ex-proof monitoring device' function and usability. It is designed to meet the IIC gases group(for example, Hydrogen, acetylene, ethylene, coke oven gas, dimethyl ether) and combustible dust and other very special environmental's requirements. It's Explosion-proof performance comply with GB3836.1-2010, GB3836.2-2010's requirements. Its manufacturing comply with the regulations of IEC60079, IEC21641, GB3836-2010 and GB12476.1-2010; The internal structure of the ptz is highly integrated, simple circuit design, little heat dissipating capacity, conducive to the camera's operation under high temperature. it comes with the function of fast track, 360°rotation, automatic flip, pattern scanning, mode path and on-screen menus. Digital HD 2.0Megapixel signal output, this ptz camera have strong function, high cost performance, easy to use and to install.

Products specification

Mdel number	HL-E9001S network HD speed dome Camera
Ex-marking	ExdIICT6
IP Grade	IP68
Image sensor	1/2.9", 2.43 Mega CMOS Sensor
Effective Pixels	2.1 megapixel
Signal System	1080p/30, 1080p/25
Lens	20x zoom lens 4.7mm~94mm F1.6(w)~F2.8(T)
Zoom Speed	2~3 S
Viewing angle(horizontal)	59°(W)~3.3°(T)
Minimum illumination	0.5LUX(F1.6, ICR on)
Defogging	Yes(on/off)
Auto iris	Yes(Automatic, manual)
Day and night switching	Yes(Automatic, manual)
IR-CUT	Yes(Automatic, manual)
Video output	LVDS output(Signal format comply with SMTPE274/SMTPE296)
SNR	> 50dB
Noise Reduction	High/medium/low,/off
Electronic Shutter	1/1~1/10
White Balance	Automatic/ATW/outdoor/ indoor/ One-button/manual
Automatic exposure control	Automatic /manual
Sync signal	Internal
DWDR	Yes(DWDR)
BLC	Yes(on/off)
Privacy Zone Masking	Yes(8 zone optional)
Working temperature	-30°C~ +60°C
Power supply	DC9~12V
Max power consumption	3w
Working environment Temperature	-25~60°C, Humidity ≤95%(No condensation)
Weight	4kg
Dimension	90.3×50.3×60mm

HL-E9002

Ex-proof Intelligent Integration PTZ camera



HL-E9002 is a outdoor Ex-proof Integration camera, equipped with Ex-proof PTZ and Ex-proof Decoder, move up, down, left, right, 3X no dead angle surveillance, all components are first-rate stable and reliable stainless steel, mechanical wiper is optional, nano glass can self cleaning. The Ex-proof range and Temperature range meet the highest specified demands, can work in all gas proof environments.

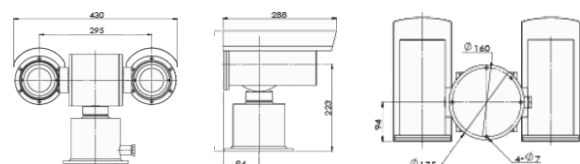
Products specification

Model	HL-9002
Mark of Ex-proof	ExdIICT6, DIP A20 TA, T6
Material	Stainless steel 304 or 316L
Grade of Ex-proof	IP68
Rotate horizontal	0~356°
Rotate vertical	+90°~-90°
Rotate speed horizontal	0.1°/S~25°/S
Rotate speed vertical	0.1°/S~25°/S
Preset	128
Distance	100M with LED
Net weight	20Kg
Pressure	80KPa~106KPa
Voltage	AC24V
Electronic	<2A
Single direction Consumption	18W
Working temperature	-25°C~+60°C
Connection	6 Core Cable
Humidity	95%<(+25°C)
Installation	Fix bracket, base, column
Mechanical wiper	Optional
Telephoto speed limit	YES
Preset Cruise	256
Communication mode	RS-485
Camera	Samsung, Panasonic, Sony optional

Optional accessories



Installation Diagram



Ex-proof Intelligent Integration PTZ camera

HL-E8007

Obtain CQST Certification.

HL-E8007 is a outdoor Ex-proof Integration camera, equipped with Ex-proof PTZ and Ex-proof Decoder. Its Ex-proof range meet the specified of GB3836.1-2000 and GB 12476.1-2000, it's special designed for IIC gas environments like Hydrogen, Acetylene, Ethylene, Coke oven gas, Methyl ether, and combustibile dust, HL-E8007 body is compact, concise, light, easy to install and maintain.

Products specification

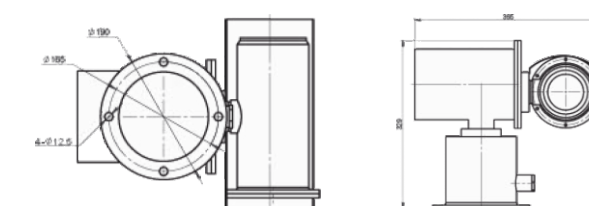
Model	HL-E8007
Mark of Explosion-proof	ExdIICT6/DIP A20Ta, T6
Certification No. Of Explosion-proof	CE13.1062X
Material	Stainless steel 304 or 316L
Grade of Explosion-proof	IP68
Bearing way	Side bearing
Rotate horizontal	0~360°
Rotate Vertical	±180°
Rotate speed horizontal	7°/S±5%
Rotate speed Vertical	7°/S±5%
Surface treatment	Stainless steel surface shining treatment
Weight	17KG
Wall mounting	HL-9023
Voltage	AC24V
Consumption	30W
Electrical connection	1pcs G3/4" 6core cable
Ambient temperature	-30°C~+65°
Communication mode	RS-485
Communication rate	2400/4800/9600/19200
Communication protocol	PELCO-D/P optional
Position preset	128
Decoder	Inside with preset
Dynamo	LSHT PMDC motor with high-precision planet-gear speed reducer
Transmission mechanism	Smooth processing & preservative treatment
Camera	Sony, Samsung, Hitachi optional
Sky shade	Standard
Windscreen wiper	Invisible, nanometer



Optional accessories



Installation Diagram



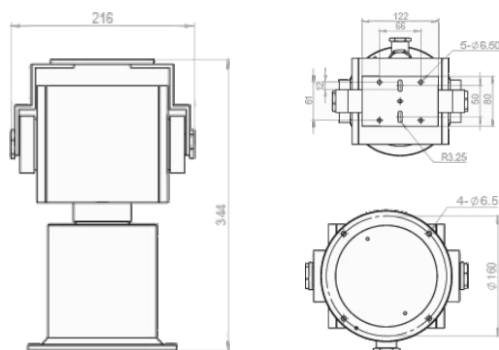
HL-E8009



Optional accessories



Installation Diagram



Intelligent Integration PTZ

Obtain CQST Certification.

E8009-1 is a classical electronic Ex-proof PTZ, it can work with various cameras in the environment of inflammable and explosive gas, meet the GB3836.1-2010, GB3836.2-2010 demands, suitable for IIA, IIB, IIC inflammable gas, and 1,2 district of Ignition temperature T1-T6 group, also good for 20, 21, 22 districts of T1-T6 where have inflammable dust and gas. It has big load torque, smooth twirl, low noise, suitable for oil field, oil depot, chemical industry, gas, ferry, desert, border defence, it can move up, down, left, right, 3X no dead angle surveillance, it move by high torque magnetism device, all components are made of first-rate stable and reliable stainless steel. E9008-1 do not work alone, it can work with various Ex-proof housings, add IR Lens to create EX-proof system. Easy to install and maintance, install with fix bracket, base, column, tower.

Products specification

Model	HL-8009-1
Ex-mark	ExdIICT6/DIP A21TA.T6
Ex-proof Certificate	CE13.1422X
Material	304 or 316 stainless steel
IP Grade	IP68
Load	Slide/Top load
Max load	25kg
Pan speed	0-356°
Vertical rotation	±45°
Horizontal Rotation Speed	6°/S
Pitching Speed	4°/S
Surface treatment	Stainless steel surface gloss
Weight	12Kg
Wall bracket	HL-9022/HL-9023
Input voltage	24V AC
Electric current	<3A
Power consumption	One-way 18W
Connection	6 Core Cable
Working environment	-30°C~+60°C
Decode	Build-in/external optional
Electrical machine	Permanent magnet DC motor with high torque high progress planet gear speed reducer
Transmission mechanism	All the gear mechanism internal components have been treated with lubrication and corrosion protection
Driving structure	All gear structure(internal components are lubricating and aczoiling)
Coil out size	M20x15, G3/4" optional
Coil out number	2
Install	Meavy PTZ bracket, column
Control mode	PTZ control or Decode controller
Humidity	≤95%RH+25°C
Rotate speed	3°/S
Rotate angle	Morizental 350°, Vertical ±45°
Pressure	80KPa~106KPa
Consumption	45W

Electric index		Electric	
Input voltage	External AC24V(±10%)	Input voltage	Indexinternal AC24V (±10%)
Input voltage range/ working current	0.75~1.5A	Input voltage range/ working current	1.5~2.35A
Consumption	36W	Consumption	45W
Communicate mode		Communicate mode	RS-485
Communicate rate		Communicate rate	Multi (adjustable)
Communicate protocol		Communicate protocol	Multi (adjustable)
Electric connection		Electric connection	
5 core cable for PTZ control connect up, down, left, down public cable		2 core cable for power	Green yellow: AC24V
2 core cable for signal control		2 core cable for signal Control	Red 485+Black485-
Video cable for video signal output		Video cable for video signal output	Gray
Environment index		Environment index	
Pressure	86KPa~110KPa	Pressure	86KPa~110KPa
Working Temperature	-30°C~+60°C	Working Temperature	-30°C~+60°C
Humidity	93%(+60°)	Humidity	93%(+60°)
Mechanical index		Mechanical index	
Material	304, 316 optional	Material	304, 316 optional
Horizontal rotate angle	350°	Horizontal rotate angle	350°
Horizontal rotate speed	6.25/S	Horizontal rotate speed	6.25/S
Up/Down rotate angle	45°	Up/Down rotate angle	45°
Up/Down rotate speed	6.25/S	Up/Down rotate speed	6.25/S
Constant speed	56S/Circle	Constant speed	
Variable speed		Variable speed	
Electric device	60KTY2	Electric device	60KTY2
Driving Structure	Gear decelerate	Driving Structure	
Coil out number	2	Coil out number	2
Coil out size	20x1.5	Coil out size	20x1.5

Intelligent Integration PTZ

Obtain CQST Certification.

E8009-2 is a classical electronic Ex-proof PTZ, it can work with various cameras in the environment of inflammable and explosive gas, meet the GB3836.1-2010, GB3836.2-2010 demands, suitable for IIA, IIB, IIC inflammable gas, and 1,2 district of Ignition temperature T1-T6 group, also good for 20, 21, 22 districts of T1-T6 where have inflammable dust and gas. It has big load torque, smooth twirl, low noise, suitable for oil field, oil depot, chemical industry, gas, ferry, desert, border defence, it can move up, down, left, right, 3X no dead angle surveillance, it move by high torque magnetism device, all components are made of first-rate stable and reliable stainless steel. E8009-2 do not work alone, it can work with various Ex-proof housings, add IR Lens to create EX-proof system. Easy to install and maintance, install with fix bracket, base, column, tower.

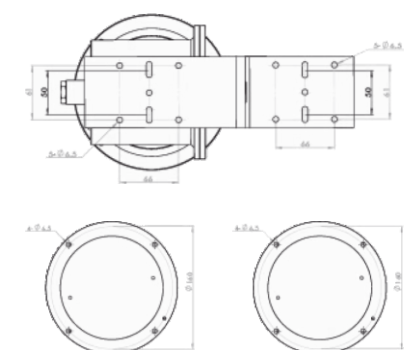
HL-E8009



Optional accessories



Installation Diagram



Products specification

Model	HL-8009-2
Ex-mark	ExdIICT6/DIP A21TA.T6
Ex-proof Certificate	CE13.1422X
Material	304 or 316 stainless steel
IP Grade	IP68
Load	Slide/Top load
Max load	25kg
Pan speed	0-356°
Vertical rotation	±45°
Horizontal Rotation Speed	6°/S
Pitching Speed	4°/S
Surface treatment	Stainless steel surface gloss
Weight	12Kg
Wall bracket	HL-9022/HL-9023
Input voltage	24V AC
Electric current	<3A
Power consumption	One-way 18W
Connection	6 Core Cable
Working environment	-30°C~+60°C
Decode	Build-in/external optional
Electrical machine	Permanent magnet DC motor with high torque high progress planet gear speed reducer
Transmission mechanism	All the gear mechanism internal components have been treated with lubrication and corrosion protection
Driving structure	All gear structure(internal components are lubricating and aczoiling)
Coil out size	M20x15, G3/4" optional
Coil out number	2
Install	Meavy PTZ bracket, column
Control mode	PTZ control or Decode controller
Humidity	≤95%RH+25°C
Rotate speed	3°/S
Rotate angle	Morizontal 350°, Vertical ±45°
Pressure	80KPa~106KPa
Consumption	45W

Electric index	External	Electric	Indexinternal
Input voltage	AC24V(±10%)	Input voltage	AC24V (±10%)
Input voltage range/ working current	0.75~1.5A	Input voltage range/ working current	1.5~2.35A
Consumption	36W	Consumption	45W
Communicate mode		Communicate mode	RS-485
Communicate rate		Communicate rate	Multi (adjustable)
Communicate protocol		Communicate protocol	Multi (adjustable)
Electric connection		Electric connection	
5 core cable for PTZ control connect up, down, left, down public cable		2 core cable for power	Green yellow: AC24V
2 core cable for signal control		2 core cable for signal Control	Red 485+Black485-
Video cable for video signal output		Video cable for video signal output	Gray
Environment index		Environment index	86KPa~110KPa
Pressure	86KPa~110KPa	Pressure	
Working Temperature	-30°C~+60°C	Working Temperature	-30°C~+60°C
Humidity	93%(+60°)	Humidity	93%(+60°)
Mechanical index		Mechanical index	
Material	304, 316 optional	Material	304, 316 optional
Horizontal rotate angle	350°	Horizontal rotate angle	350°
Horizontal rotate speed	6.25/S	Horizontal rotate speed	6.25/S
Up/Down rotate angle	45°	Up/Down rotate angle	45°
Up/Down rotate speed	6.25/S	Up/Down rotate speed	6.25/S
Constant speed	56S/Circle	Constant speed	
Variable speed		Variable speed	
Electric device	60KTY2	Electric device	60KTY2
Driving Structure	Gear decelerate	Driving Structure	
Coil out number	2	Coil out number	2
Coil out size	20x1.5	Coil out size	20x1.5

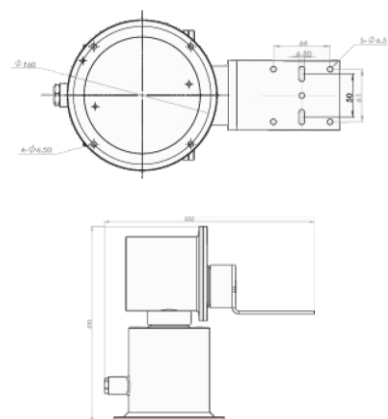
HL-E8009



Optional accessories



Installation Diagram



Intelligent Integration PTZ

Obtain CQST Certification.

E8009-3 is a classical electronic Ex-proof PTZ, it can work with various cameras in the environment of inflammable and explosive gas, meet the GB3836.1-2010, GB3836.2-2010 demands, suitable for IIA, IIB, IIC inflammable gas, and 1,2 district of Ignition temperature T1-T6 group, also good for 20, 21, 22 districts of T1-T6 where have inflammable dust and gas. It has big load torque, smooth twirl, low noise, suitable for oil field, oil depot, chemical industry, gas, ferry, desert, border defence, it can move up, down, left, right, 3X no dead angle surveillance, it move by high torque magnetism device, all components are made of first-rate stable and reliable stainless steel. E8009-3 do not work alone, it can work with various Ex-proof housings, add IR Lens to create Ex-proof system.

Products specification

Model	HL-8009-3
Ex-mark	ExdIICT6/DIP A21TA.T6
Ex-proof Certificate	CE13.1422X
Material	304 or 316 stainless steel
IP Grade	IP68
Load	Slide load
Max load	25kg
Pan speed	0-356°
Vertical rotation	±45°
Horizontal Rotation Speed	6°/S
Pitching Speed	4°/S
Surface treatment	Stainless steel surface gloss
Weight	11Kg
Wall bracket	HL-9022/HL-9023
Input voltage	24V AC
Electric current	<3A
Power consumption	One-way 18W
Connection	6 Core Cable
Working environment	-30°C~+60°C
Decode	Build-in/external optional
Electrical machine	Permanent magnet DC motor with high torque high progress planet gear speed reducer
Transmission mechanism	All the gear mechanism internal components have been treated with lubrication and corrosion protection
Driving structure	All gear structure(internal components are lubricating and aczoiling)
Coil out size	M20x15, G3/4" optional
Coil out number	2
Install	Meavy PTZ bracket, column
Control mode	PTZ control or Decode controller
Humidity	≤95%RH+25°C
Rotate speed	3°/S
Rotate angle	Morizental 350°, Vertical ±45°
Pressure	80KPa~106KPa
Consumption	45W

Electric index	External	Electric	Indexinternal
Input voltage	AC24V(±10%)	Input voltage	AC24V (±10%)
Input voltage range/ working current	0.75~1.5A	Input voltage range/ working current	1.5~2.35A
Consumption	36W	Consumption	45W
Communicate mode		Communicate mode	RS-485
Communicate rate		Communicate rate	Multi (adjustable)
Communicate protocol		Communicate protocol	Multi (adjustable)
Electric connection		Electric connection	
5 core cable for PTZ control connect up, down, left, down public cable		2 core cable for power	Green yellow: AC24V
2 core cable for signal control		2 core cable for signal Control	Red 485+Black485-
Video cable for video signal output		Video cable for video signal output	Gray
Environment index		Environment index	86KPa~110KPa
Pressure	86KPa~110KPa	Pressure	
Working Temperature	-30°C~+60°C	Working Temperature	-30°C~+60°C
Humidity	93%(+60°)	Humidity	93%(+60°)
Mechanical index		Mechanical index	
Material	304, 316 optional	Material	304, 316 optional
Horizontal rotate angle	350°	Horizontal rotate angle	350°
Horizontal rotate speed	6.25/S	Horizontal rotate speed	6.25/S
Up/Down rotate angle	45°	Up/Down rotate angle	45°
Up/Down rotate speed	6.25/S	Up/Down rotate speed	6.25/S
Constant speed	56S/Circle	Constant speed	56S/Circle
Variable speed		Variable speed	
Electric device	60KTY2	Electric device	60KTY2
Driving Structure	Gear decelerate	Driving Structure	Gear decelerate
Coil out number	2	Coil out number	2
Coil out size	20x1.5	Coil out size	20x1.5

HL-E8005 Ex-proof PTZ

Have certification of national Ex-proof electronic products quality control center.

The specifications meet GB3836.1-2000/GB3836.9-2006 standard of machanical and electric's demand. Adapted to the environment of the factory where has the gas IIA, IIB, and IIC, the temperature T1-T4, and the explosive gas and the dust., the advantages: mini size, light weight, easily install, auto-function, full-sealed structure, IP68 grade, can even working in the water in a short time.

Products specification

Model	HL-E8005
Ex-mark	ExmbIIT4 Gb
Certificate number	CNEx13.3248X
Matirialala	Alloy, cast alunium
IP grade	IP67
Mount way	Mounted
Maximum load	25kg
Horizontal spin	0~350°
Vertical spin	-45°~+45°
Horizontal spin speed	6°/s
Vertical speed	4 degree/s
Products wight	7kg
Wall braket	HL-9012
Working volte	24V AC
Auxillary volte	12V DC
Current	2A
Consumption	14W
Electric connect	8 core cable
Temperature	-30°C~+60°C

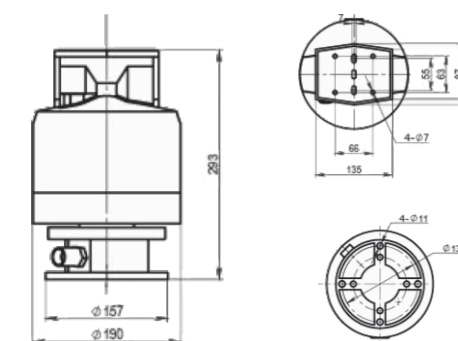
HL-E8005



Optional accessories



Installation Diagram



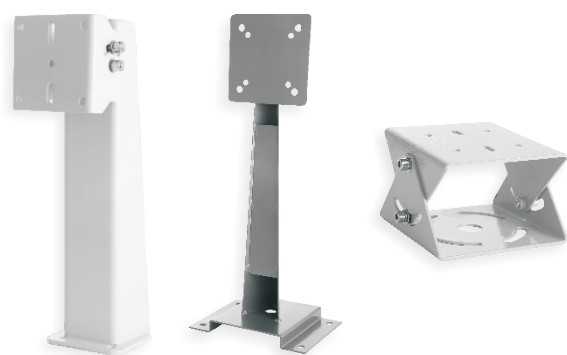
HL-KBA127

Mine Isolated Ex-proof Camera



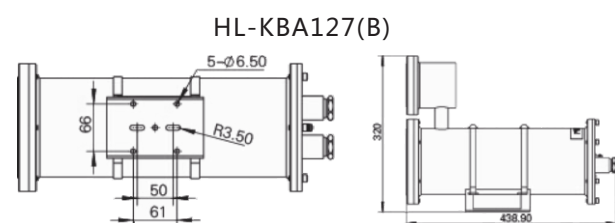
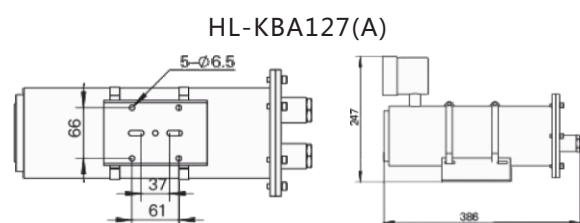
KBA127A mine isolated Ex-proof camera is well stable Ex-proof surveillance equipment. As a classic products, endure and deserve the faith. Can be applied in the high risk environment, such as mine where there is flameable gas and dust. The camera is super-low lux camera, can capture the images under the dark condition. Made of stainless steel, stable work during the temperature of -20- 40 degree, 127V AC power supplier, the window use impering class, gurantee the quality of the image.

Optional accessories



With two outlet hole, can have electric connect between Ex-proof tube and cable. Easily install, maintain, semi-fix PTZ or fixed bracket, base, or pilliar installation.

Installation Diagram



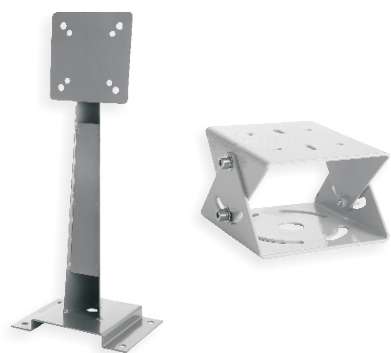
Products specification

Model	KBA127(A)	KBA127(B)
Ex-proof mark	Exd I Mb	Exd I Mb
IP grade	IP 67	IP 67
Matirial	304 or 316L stainless steel	304 or 316L stainless steel
Install	Semi-fixed PTZ, Fix braket	Semi-fixed PTZ, Fix braket
Minimum lux	≤1.0 lux	≤1.0 lux
Video output	1vp-p.75 omega	1vp-p.75 omega
Weight	9kg	19kg
Input volte	AC127V	AC127V
Working current	≤1A	≤1A
Lens	3.5~8mm F1.3 manual adjust	Computer3.5~8mm, auto
Consumption	24W	24W
Horizontal solution	≥300tvl	≥350tvl
Gray level	≥7 level	≥7 level
Image	Black/white	Black/white
Pressure	80kpa~110kpa	80kpa~110kpa
Temperature	-20- 40 degree	-20- 40 degree
Huminity	≤95%(+25°C)	≤95%(+25°C)
Outlet hole	2	2
Outlet hole specification	G3/4	G3/4
Wave length	1310nm	1310nm
Single transmit power	≥-20dBm	≥-20dBm
Receive sentivity	<-30dBm	<-30dBm
Max transmit distance	30km~50km	30km~50km
Power supplier	2 core cable	2 core cable
Light signal output	FC	SC
Light signal typt	Video light signal	Network light signal
Fiber model	sigle	Sigle
Model	WAT-902H2	WAT-902H2
TV system	NTSC, PAL	NTSC, PAL
Scan ways	21 interlacing scan	21 interlacing scan
Sensor	1/3"CMOS	1/3"CMOS
Sycr system	interno	interno
TV lines	2.0Megapixel	2.0Megapixel
S/N	46db	46db

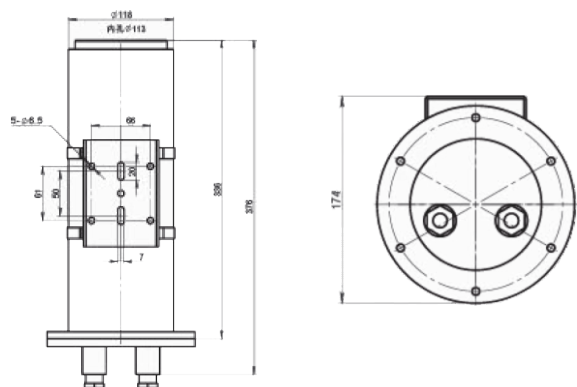
HL-KBA156



Optional accessories



Installation Diagram



Mine Isolated Ex-proof Camera

Have certification of national Ex-proof electronic products quality control center.

The specifications meet GB3836.1-2000/GB3836.9-2006 standard of mechanical and electric's demand. Adapted to the environment of the factory where has the gas IIA, IIB, and IIC, the temperature T1-T6, and the explosive gas and the dust, can be used shield of the CCTV camera. The whole shield and all components are made of stainless steel, with high force and stability. And adapted to advanced design and processing, maintain the integrity and force. In the isolated camera shield, cameras install on the drawer panel. Drawer panel and back shield was connected insulations. Can anti-interfere of electric, easily installation, use tempering glass to have wide vision angle. The series ex-proof cameras can use fixed lens camera and varifocal cameras, if necessary, can compensate light by cold light illuminator, to get the best surveillance effect.

KBA156 testing project and technical

The outlook meet the standard of the enterprise 4.5 article

- ◆ Positive polarity
- ◆ Output impedance 75Ω
- ◆ Have high quality image under low lux.
- ◆ Transfer the reality image into output video signal
- ◆ KBA156 contains the specifications of WAT-902H3
- ◆ WAT-902H3 super low lux B/W camera

Working volte	Ac127	Grade	≥7
Current(mA)	≤1000	Video signal output	1V
Minimum lux	≤1.0	Video signal	0.7+/-0.2V
Horizontal resolution	≥350tvl	Sycr signal	0.3+/-0.1V

Products specification

Model	HL-KBA156	Video output value	1V
Ex-mark	ExdI	Video signal	0.7±0.2V
Certificate number	MAK100021	Weight	6kg
Matirial	304.316 Steel	Input volte	AC127V
IP grade	IP 67	Sycr signal	0.3±0.1V
Install way	Semi-Fixed PTZ, fixed braket	Cold light iluminator	selectible
Minimum lux	≤0.00003/0.00005luxF1.4	Current	≤1000mA
Horizontal resolution	≥570TVL	Lens	3.5~8mm manual adjust lens
Gray	Level 7	Camera	Waterc black/white cameras
Terminator	Single video, 850mm wave	In/out	2 pcs, M20×1.5
Power supplier	INAC86V-AX265V,OUTDC12V1.2A		

Technical specifications

CCD size	1/3 inch	Fixed Electric shutter	Off(1/50)
pixel	C440k	Anti-blink	F.L(1/120)
Sync system	Interno	Electric shutter	EI(1/50-1/100, 000sec)
Video output	1VPP-75omega	Interface	CS
Horizontalrelolution	570TVL	Working volte	DC+12V~±10%
Minimum lux	0.0005lux,F1.4(AGC:high)	Working current	160mA
Auto gain control	High:5-50, low5-32dB	Save temperature	-30~ +70
S/N ratio	46	Working temperature	-10~ +40
Gray	Y=0.45		

Technical specification

Sealed level	IP65	Rated power	≤10W
Rated vloted	DC12V, AC127V	Size	415mm×148mm

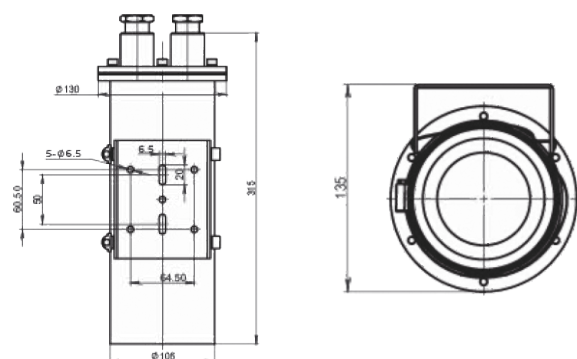
HL-CBA814



Optional accessories



Installation Diagram



Factory isolated Ex-proof camera

Have certification of national Ex-proof electronic products quality control center.

CBA814 proof shield is a new updated ex-proof surveillance equipment, use advanced processing technology, and adapted to natural quality control system, to guarantee the quality and functions have best reputation in Ex-proof surveillance area. Can be used in where there is flammable gas IIA, IIB, IIC, light temperature are 20,21,22 set of T1-T6. and where are flammable dust. Can work with kinds of electronic PTZ, to realized live monitor, CBA814 can install fixed lens or verifocal lens, and also integrated camera, the window is made of impeing class, to guarantee the quality of the image, with 2 outlet hole, support Ex-tube and electric cable connected. easily install, maintain, semi-fix PTZ or fixed bracket, base, or pilliar installation.

Products specification

Modle	HL-CBA814
Ex mark	Exd IIC T6 Gb; DIP A20TA, T6
Certificate number	CE13.1027X
Matirial	304,316 or 316L
IP Grade	IP 66
Out size	400×165mm
Inside size	305×115mm
Weight	7kg
Outlet hole	2
Outlet specification	M20×1.5
Power supplier	DC12V, AC24V
Temperature	-30°C~+60°C
Wiper	Invinsible wiper
Input volte	24V AC/12DC, depende on the camera
Working current	≤2A
Consumption	≤10W
Thin of window vision	10mm
Window size	66mm
Install	Electric PTZ, fixed PTZ, bracket
Working temperature	-25°C~+60°C
Huminity	Less than 95%(+25 degree)
Auto heating	Selectible
Auto cooling	Selectible
Anti-frozen	Selectible
Self cleaning	With
Lens decoder	Selectible
Control	RS485
Protocol	Pelco-D/P
Output	AV/fiber/ coaxiel cable/ H.264 network

HL-E8000D



HL-E8000D Ex-proof camera

Have certification of national Ex-proof electronic products quality control center.

Can be used in where there is flammable gas IIB, light temperature are 20,21,22 setor of T1-T6. and where are flammable dust.

Made of high strenthen 304 or 316 stainless steel, install the camera in the shield, the camera can be drawered in and out by the drawer board.

Easily install, vision window made of impeing class, the long diameter to get wider vison angle , back board, vision window and cables are all easily resembling and dispatching.

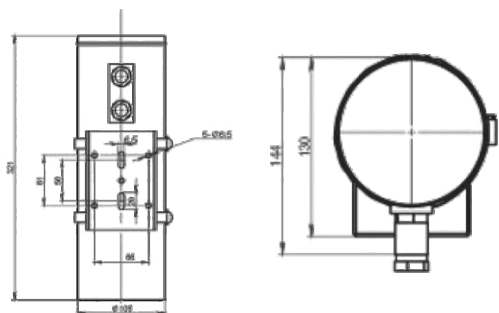
Optional accessories



Products specification

Model	HE-8003D	HL-E8003Dwithfans
Exmark	Exd IIBT6 Gb	Exd IIBT6 Gb
Matiral	304.316or316L selectible	304.316or316L selectible
Out size	325×107mm	380×107mm
In size	280×101mm	230×101mm
Weight	4kg	5kg
Outlet hole	2	2
Outlet hole specification	M20×1.5	M20×1.5
Power supplier	12V DC, 24V AC/2A	12V DC, 24V AC/4A
Temperature	-30°C~+60°C	-30°C~+60°C
Certificate number	CNEx13.2898	CNEx13.2898
IP grade	IP67	IP67

Installation Diagram



HL-E8000D Ex-proof camera

Have certification of national Ex-proof electronic products quality control center.

Can be used in where there is flammable gas IIB, light temperature are 20,21,22 setor of T1-T6. and where are flammable dust.

Made of high strenthen 304 or 316 stainless steel, install the camera in the shield, the camera can be drawered in and out by the drawer board.

Easily install, vision window made of impeing class, the long diameter to get wider vison angle , back board, vision window and cables are all easily resembling and dispatching.

HL-E8000D



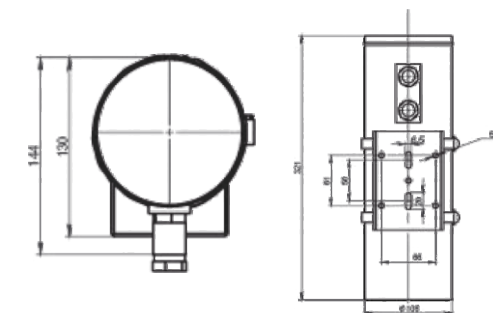
Products specification

Model	HE-8004D	HL-E8004Dwithfans
Exmark	Exd IIBT6 Gb	Exd IIBT6 Gb
Matiral	304.316or316L selectible	304.316or316L selectible
Out size	380×131mm	430×131mm
In size	335×125mm	285×125mm
Weight	6kg	7kg
Outlet hole	2	2
Outlet hole specification	M20×1.5	M20×1.5
Power supplier	12V DC, 24V AC/2A	12V DC, 24V AC/4A
Temperature	-30°C~+60°C	-30°C~+60°C
Certificate number	CNEx13.2898	CNEx13.2898
IP grade	IP67	IP67

Optional accessories



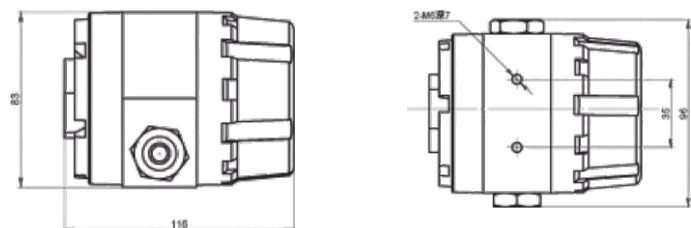
Installation Diagram



HL-E8006



Installation Diagram



Products specification

Model	HL-E8006 mobile
Ex-Mark	Exd[IB]IICT6 Gb; DIP A20TA, T6
EX Standard	DIP A20 TA, T6
QS number	XK06-014-00869
Materiel	High-strength aluminum alloy
IP Grade	IP66
Weight	1kg
Power	12V
Lens	6mm/8mm(optional)
Sensor	1/3 sony CCD
IR distance	20m
Resolution	540TVL
Lux	Color 1.0lux, black/white 0lux
TV system	PAL
Video output	1.0vp-p(complete video)
Day/night switch	Auto(ICR auto switch)
SNR	≥50db
White balance	Auto
Sysn system	V-lock
Electronic shutter	1/1s~1/10000s
AGC	Auto
AE control	Auto
EV compensate	-10.5~+10.5dc
Blc	On/off
IR on/off	Auto turn on under 0 lux
AC current	<1A
Power Consumption	≤10W
Operation temperature	-25°C ~ +70°C
Pressure	80~106kpa
Humidity	≤95%RHL+25°C
Horiontal Resolution	700tvl
Outlet hole	M20*1.5

Mobile Anti-Explosin Camera

Meet specification of GB3836.1-2010(Electric equipment in the environment of explosive gas. Part 1: GB3836.2-2010(Electric equipment in the environment of explosive gas, Part 2: type D), to make it in isolated explosion construction. Adapted to IIA, IIB, IIC inflamable gas, ignite temperate is part1-2 in the T1 to T6 Grup. Be used in ambiante of Flammable gas or mixture of vapour and air or anbiante where include flammable dust, such as, petrol, chemistry, mine, military, medicine, gas tank, gas station etc. High strength aluminum alloy materials, small size, light in weight, Avoid the risk of accidental lighter, fixed monitor area and target, Special seismic processing, auxiliary infrared cameras, so as to adapt to different environment. The built-in high brightness infrared Leds, Megapixel HD camera, day-night, With small size, weight, flexible configuration, functions of advanced features, is a specially designed to meet the demand of oil transport vehicle monitoring of quality product.

HL-E8000 Series Anti-Explosive Camera

New anti-explosive shelter, light.

Meet GB3836.8-2003, adapt to the enviroment of mixture of flammable gas and dust, auto conditionor, invincible wiper, heat shield.

HL-E8000

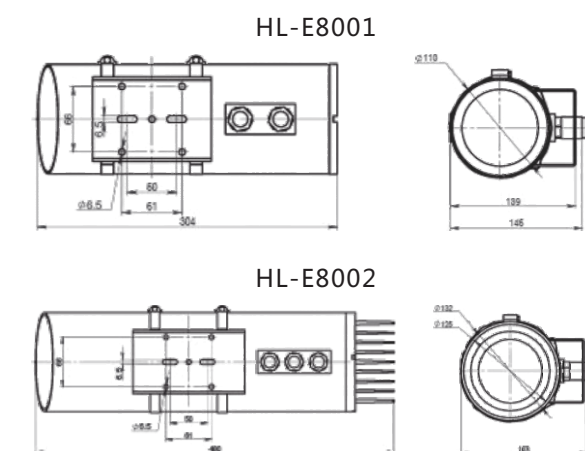


Products specification

Model	E8001	E8001 with conditionor
Ex-mark	Exn A IIT4 Gc	Exn A IIT4 Gc
Ex-proof certificate No.	CNE×13.3247X	CNE×13.3247X
IP grade	IP66	IP66
Dimension (outside)	295×110mm	360×110mm
Inside diameter	245×104mm	200×104mm
Weight	2kg	2kg
Outlet hole	2	2
Outlet hole specification	M20×1.5	M20×1.5
Power supplier	24V AC12V DC	24V AC12V DC
Matiral	Aluminium alloy	Aluminium alloy

Model	E8002	E8002 with conditonor
Ex-mark	Exn A IIT4 Gc	Exn A IIT4 Gc
Ex-proof certificate No.	CNE×13.3247X	CNE×13.3247X
IP grade	IP66	IP66
Dimension (outside)	430×132mm	435×132mm
Inside diameter	360×125mm	310×125mm
Weight	7kg	7kg
Outlet hole	3	3
Outlet hole specification	M20×1.5	M20×1.5
Power supplier	24V AC12V DC	24V AC12V DC
Matiral	Stainless steel	Stainless steel

Installation Diagram



HL-E8001



IR Ex-proof integration Camera

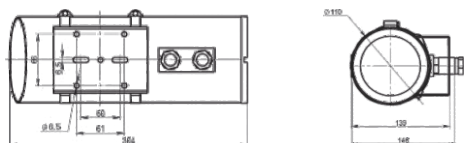
ExnA IIT4 Ex-mark, meet the national standard GB3836.8-2003, applied in ambiente of mixture flammable gas and dust.

No need extral sunshading board, tempered vision glass, sustain 4J strike and not be broken, and the shield sustain 7J strike and not be broken. Based and cylinder shield connected with a stainless steel cable tie, Internal pull from the cylinder at the back of the drawer board, convenient installation, auto conditioner, invincible wiper, heat shield.

Optional accessories



Installation Diagram



Products specification

Model	E8001-20B
Ex-mark	Exn A IIT4 Gc
Ex-proof certificate No.	CNE×13.3247X
Matiral	Aluminium alloy
IP Grade	IP66
Dimension	295×110mm
Weight	2kg
Volte input	DC12V
Lens	6mm, 8mm
Operate current	≤1A
LED wave lens	850mm
Horizontal resolution	480/570/700tvl
Minimum Lux	0.1Lux

Model	E8001-50B
Ex-mark	Exn A IIT4 Gc
Ex-proof certificate No.	CNE×13.3247X
Matiral	Aluminium alloy
IP Grade	IP66
Dimension	295×110mm
Weight	2kg
Volte input	DC12V
Lens	6.8.12.16.25mm selectable
Operate current	<2A
LED wave lens	850mm
Horizontal resolution	480/570/700tvl
Minimum Lux	0.1Lux

Model	E8001-100B
Ex-mark	Exn A IIT4 Gc
Ex-proof certificate No.	CNE×13.3247X
Matiral	Aluminium alloy
IP Grade	IP66
Dimension	295×110mm
Weight	2kg
Volte input	DC12V
Lens	22×3.9-85.8mm; 27×3.6-97.2mm selectable
Operate current	<2A
LED wave lens	850mm
Horizontal resolution	480/570/700tvl
Minimum Lux	0.1Lux

HL-E8011 Ex-proof Laser Camera

HL-E8011 Camera is CCTV equipment, built-in IR-CUT, Support distant control. Monitor/recording, support mobile phone surveillance, compatible with most NVR manufactured in Nations, support alarm output and 485 control protocol. Audio output, dual-stream, avi format, support onvif2.0 protocol, with WDR function, most CMS software. Full stainless steel, meet GB3836.2-2010 standard, sunshade can effectively reduce the temperature of operating so as to upgrade the IP grade. The camera is with 4 laser led, can reach 100meter IR distance, made by special tempering glass, gurantee the effect of high Definition, easy installation and maintaince with electronic PTZ, Semi-PTZ, fixed bracket, pilliar and erection tower.

Products specification

Model	HL-E8011 Ex-proof laser IR camera
Ex-mark	Exd IICT6
IP grade	IP67
Pixel	720P, 1.0megapixel
Sensor	1/3"HI
Compression	H.264, 25-30fps
Volte	DC12V
Current	2A
Communicate interface	485 control protocol
IR mudole switch	Auto
IR distance	100m
Minimum Lux	0.5lux
Operating temp	-25°C~+70°C
Air pressure	80kpa~106kpa
Huminity	≤95%RH(+25°C)
Outlet board	2
Outlet borad standard	G-3/4"
Installation ways	3.Fixed braket, pilliar and erection tower

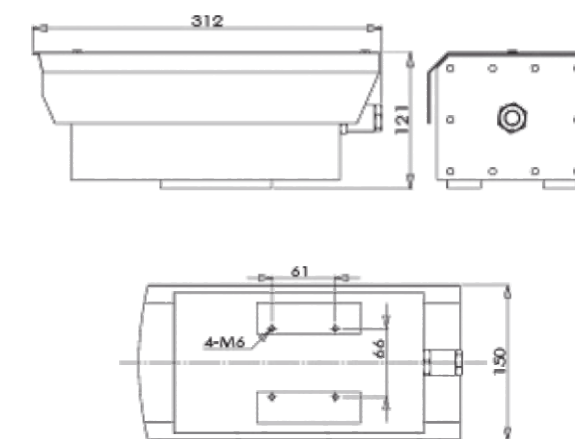
HL-E8011



Optional accessories



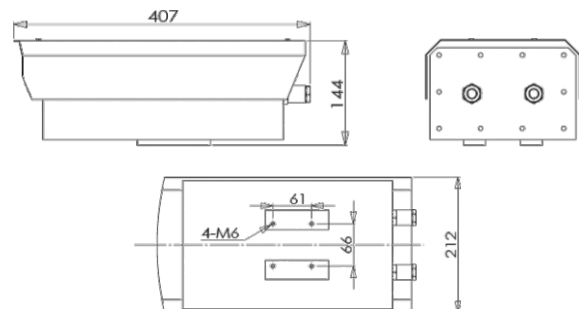
Installation Diagram



HL-E8012



Installation Diagram



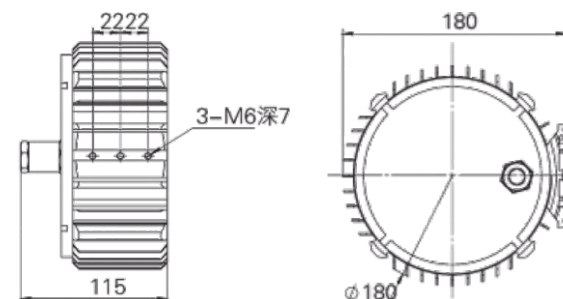
Ex-proof Laser IR Camera

Adapted to active laser infra red night vision technology, with advantages of sharp background construct. Clear image, not interfered by outside lumination, and the lumination and image sync, laser beam shaping, laser beam of uniform processing, Red light elimination and graphic calibration of imaging center, uniformity of compensation and other technical applications. Meet the national standard GB3836.1-2010, GB3836.2-2010. use High strength stainless steel materials, and special process in enhance sealed, widely applied in the conditions of night, bad environment, long distance, large area. The view distance in day can be 1000meters and 500meters at night, can realized day/night consistant surveillace.

Products specification

Lens	Focus	11~200mm,18*
	F	1.9-3.6
	Image surface	1/2 inch
	Angle	1.9-32.1
	Close-up distance	1.5M
	Back focal length	10.21mm
Laser	Auto iris	DC Driver
	Interface	C
	Rate of work	4W
	Wave length	810mm
	Angle	1-17 degree
	Luminous surface	200um
	Doging	MQMM
	Seal	Seal nitrogen filled
Laser lens	Heat dissipation	Array the wind cooling heat dissipation
	Focus	20mm laser lens 15*
	F valor	2.0
	Transmittance	>95%
	Preset	Precision potentiometer voltage feedback
	Verifocal driver	12V
Laser power supplier	Mechanical	3CAM transmission way
	Opticalaxisadjustment	External MMA adjust
	Operating type	Bipolar circuit driver, Constant pressure constant current
	Electric types	A second delay plus electric, eliminate surge pulse
Shield	Switch control	External photosensitive control independently
	Consumption	25W, DC12V
	Material	Stainless steel 304/316
Wight	Construction	The integration of double window design
	Window glass	Tempering glass
		13kg

Installation Diagram



Products specification

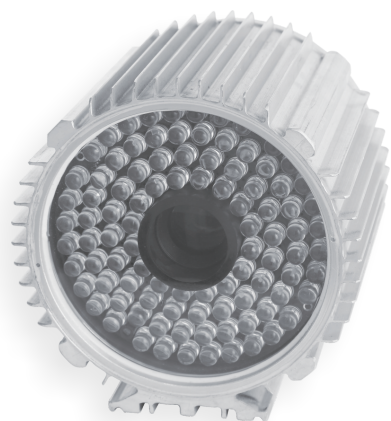
Model	HL-EXL50B	HL-ExL100B
Ex-mark	ExnA IIT4 Gc	ExnA IIT4 Gc
Certificate number	CNEx13.3249X	CNEx13.3249X
Matirial	Aluminium alloy	Aluminium alloy
IP grade	IP68	IP68
Project distance	50m	100m
Project angle	45degree	45degree
Wave length	850mm	850mm
Outlet hole standard	1M20×1.5	1M20×1.5
Dimension	80×85mm	80×85mm
Weight	2kg	5kg
Volte	12V DC	12.8V DC
Consumption	≤24W	≤36W
Operating temperate	-25°C~50°C	-25°C~50°C
IR switch		0 Lux
Power supplier		DC12V/AC220V
Current	2A	<3A
Rate of consuption		≤10W
Pressure		80kpa-106kpa
Huminity		≤95%RH (+25 degree)
Material		SUS304/LY12
Window		10mm tempering glass
Window size		150mm
Weight		≤1kg
Installation		PTZ, fixed braket, Pillar



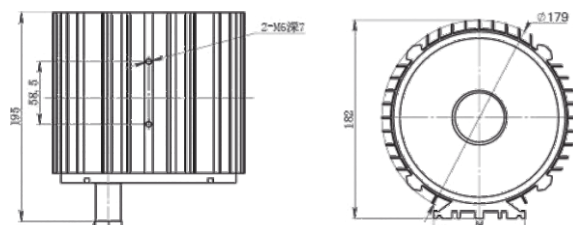
HL-ExL00B Sires Ex-proof IR Led

Have certification of national anti-explosive products quality control center.
 HL-ExL00B series Ex-proof IR leds, Infrared light emitting diode matrix luminous body, low consumption and high effective, Airtight type no spark explosion-proof structure, Suitable for indoor and outdoor various kinds of flammable gas explosion environment(except under the mine), the explosive grade meet the standard GB3836.1-2000, and GB3836.2-2000. HL-ExL50B, HL-ExL100B, radiate distance is 50m, 100m, 150m and 200m, Built-in semiconductor refrigerating unit can reduce the working temperature of IR leds. Enhance the work rate on IR radiate, the ability, 45°C radiate angle. Design the relevante equipment for Ex-proof industrial TV system, can provide excelent monitor effect in the enviroment of low lux, is the necessary component in industrial CCTV surveillance.
 Able to identify and judge the environment light intensity, automatically adjust on/off of IR leds.
 Transmission window made of special steel plate to ensure the IR led project efficiency. Can work during the temperature between -25°C to +50°C.

HL-ExL00B



Installation Diagram



Products specification

Model	HL-ExL150B Ex-proof IR camera
Ex-mark	ExnA II T4Gc
Certificate number	CNEx13.3249X
Material	Aluminum alloy
IP grade	IP66
Lens	8.5~51mm varifocal lens
Sensor	1/3 sony ccd
TV lines	540TVL
Minimum Lux	0.001lux
Dimension	190×85mm
Weight	3kg
Power input	12v DC
IR distance/ angle	150m/30°
Operating temperature	-25°C~50°C

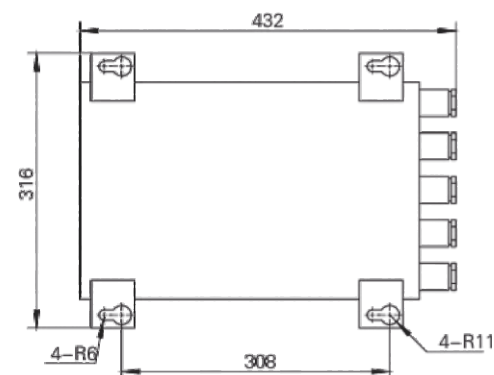
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HL-ExL50B, HL-ExL100B, radiate distance is 50m, 100m, 150m and 200m, Built-in semiconductor refrigerating unit can reduce the working temperature of IR leds. Enhance the work rate on IR radiate, the ability, 45°C radiate angle.

Installation Diagram



Products specification

Model	HL-E8013
Ex-mark	Exd II CT6
Certificate number	DIP A20 TA, T6
Production licence	XK06-014-00869
Material	Stainless steel 304 or 316L
IP grade	IP65
Outlet board hole	7
Outlet board standard	G-3/4
Install	Wall mounted
Power input	220V AC, 50/60Hz
Power range	+/- 10%
Current	≤1A
Weight	25kg
Consumption	<150W
Fuse	2A
Capacity	99ports, main line
IR distance	5km
Group setting	0~10 group
Frequency	300-400HZ
Channels	7
Signal channel	1
Outline channel	2
Voice amplify rate	0-50W selectable
Occupied voice	450 +/- 20hz
Breakeak-make ratio	(0.3-0.4)S: (0.3-0.4)S
Voice adjust	4.7K
Reduce noise function	Under 120db
Dial keyboard	0-9number, 5 functions buttons
Status lights	Power, working, signal, voice amplify
Dial setting	Voice amplify, calling stand address, authority setting
Electronic connection	16core main line input/output, 2 core power input, 2group 2core amplifier output

HL-E8013



HL-E8013 Ex-proof telephone

HL-E8013 digital Ex-proof telephone is a new digital Ex-proof phone communication system, which is designed and made for the environment of flammable gas and dust.

With timing, fully, easily advantages, effectively cover the blind spots of the factory, mine. Necessary equipment in industrial communication. Use digital tech design, main line connection, can be connected to 99ports, transmit 5km's distance.

With the function of line system detection, Digital noise reduction technology and fidelity amplifying technology has made in the high noise environment can realize high quality voice and amplification.

Can be designed for dialogue stand, group Settings, with remote calling, group calling, all calling way, realizing duplex talk to each other. Calling stand with function of voice amplify, shaking vibrante, via calling, can find the workers anywhere, 220v AC power supplier.

Through the system to link device, call stand can be connected to the SPC telephone. Use 2 digital code to re-dial when calling outside. When calling outside, can set the authority level. 0-9 number buttons and 5 function buttons, easily operate, with several status indicator lamp, in order to let the user know the working conditions.

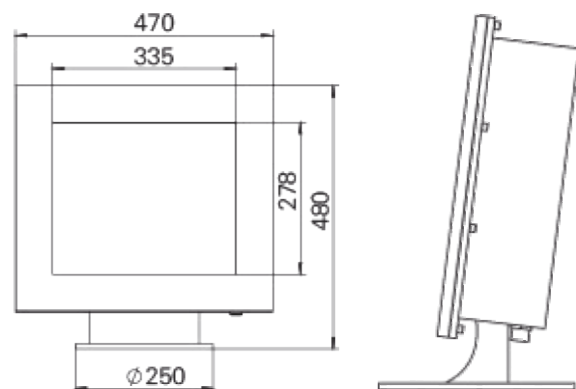
Long time stable work under the temperature of -20°C to +55°C.

Mounted on the wall, easy for maintain. Digital integrated circuit, reliable and low consumption. Keep high quality voice under ambient of 120db.

HL-E8014



Installation Diagram



Products specification

Model	HL-E8014
Ex-mark	ExdIICT6: DIP A20 TA, T6
QS number	XK06-014-00869
Material	Stainless steel 304 or 316L
IP Grade	IP65
Outlet hole	2
Outlet hole thread spec	G-3/4"
Input voltage	100VAX~240VAC, AC24V, optional
Power Consumption	30W
Input Signal	1 complex video signal or 1 RGB mode signal
Signal input	Support one way
On-off switch	1 self-locking power switch
Electronic connection	3 core wires power cable
Video input	1 coaxial cable with BNC
RGB analog input	1 cable with 15 D-USB port
Installation	Set in vertical position or lifting with professional bracket
Weight	24KG

Explosion proof monitor

17 inch LCD, resolution at 1280×1024, dot pitch

0.264mm.

With VGA and standard video connector, support NTSC and PAL system.

Using special tempering sheet glass, it's durable and solid.

Can use in real explosion places.

VGA signal input or complex video signal input.

Surface plate design, save space.

Portable design, easy to use and transfer.

Can adjust the angle to watch.

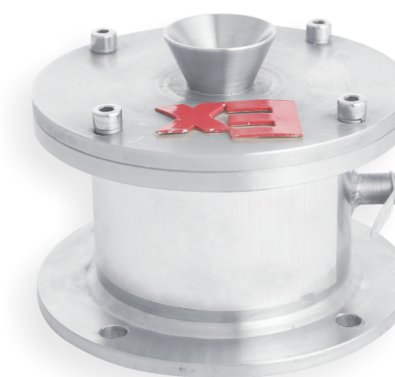
For indoor and outdoor; Need to avoid the rain

when put it in vertical position.

Products specification

Model	HL-YXSYQ-5
Ex-Mark	ExdIICT6Gb
Certificate	CNEx11.2764X
Material	304 or 316L stainless steel optional
IP Grade	IP65
Outlet hole quantity/ specifications	1 pcs M20×1.5
Installation	Wall-mountable installation, rack mounting
Outside dimension	112×68×93mm
Input voltage	DC12V(6V~12V)
Input current	20MA
Listening area	10-150m ²
Weight	1.0Kg
Environment temperature	-20°C~+60°C
Audio transmission distance	3000M
Frequency response	20Hz-20KHz
Sensitivity	-35dB
Directivity	Omni direction
Maximum sound pressure	120dB
Output impedance	600Ω
Output signal	2.5Vpp/-25db

HL-YXSYQ-5



HL-YXSYQ-5 Ex-proof pickup

Standard GB3836.1~2-2010.

Stainless steel Material, IP65.

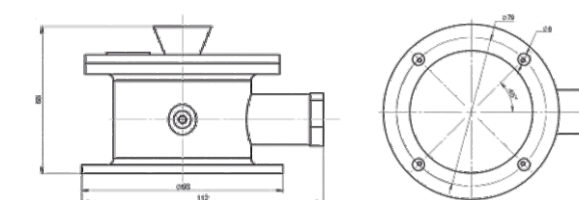
Monitor range; 10-150m².

Working Temperature: -20°C~+60°C.

Suitable for IIC gas like hydrogen, ethylene,

coke oven gas etc.

Installation Diagram

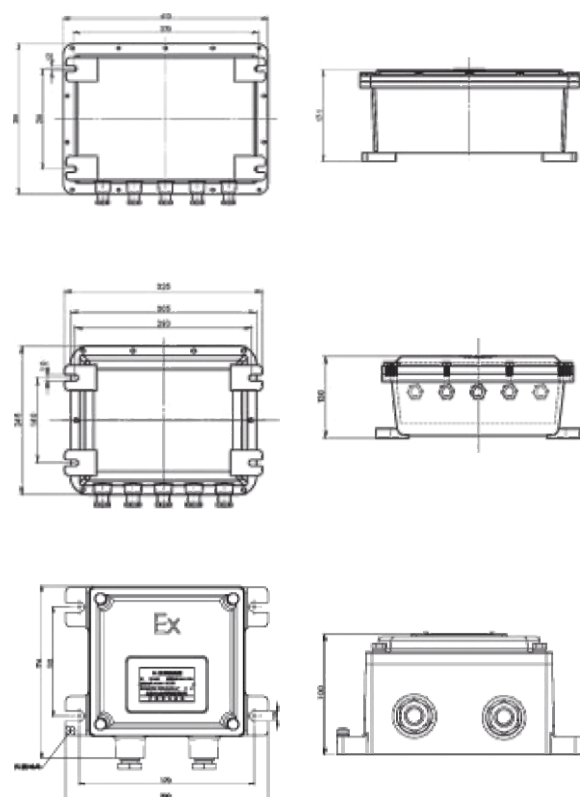


HL-Ex80



HL-Ex80 Ex-proof Junction Box

Installation Diagram



Products specification

Model	HL-Ex80 large
Ex-mark	ExdIICT6
Certification	CNE09.0240
Material	Aluminum, 304 stainless steel, explosion proof process
IP Grade	IP65
Input voltage	DC12V, AC24V, optional
Input voltage range	±10%
Working current	<300mA
Outlet hole	5
The outlet hole specification	G3/4, M20×1.5 optional
Outer space(mm)	415×320×285
Inner available space(mm)	350×240×117
Weight	12kg
Environment temperature	-20°C~+60°C
Installation	Wall mount, bottom seat, fixed bracket

Model	HL-Ex80 Middle
Ex-mark	ExdIICT6
Certification	CNE09.0240
Material	Aluminum, 304 stainless steel, explosion proof process
IP Grade	IP65
Input voltage	DC12V, AC24V, optional
Input voltage range	±10%
Working current	<300mA
Outlet hole	5
The outlet hole specification	G3/4, M20×1.5 optional
Outer space(mm)	325×245×130(blue)
Inner available space(mm)	260×196×86(blue)
Weight	7kg blue
Environment temperature	-20°C~+60°C
Installation	Wall mount, bottom seat, fixed bracket

Model	HL-Ex80 small
Ex-mark	ExdIICT6
Certification	CNE09.0240
Material	Aluminum, 304 stainless steel, explosion proof process
IP Grade	IP65
Input voltage	DC12V, AC24V, optional
Input voltage range	±10%
Working current	<300mA
Outlet hole	2
The outlet hole specification	G3/4, M20×1.5 optional
Outer space(mm)	205×190×100
Inner available space(mm)	125×119×58
Weight	2kg
Environment temperature	-20°C~+60°C
Installation	Wall mount, bottom seat, fixed bracket

Medium temperature Shield

Special design, exclusive production. With stainless steel material, the water inlet is in the front of the shield, bottom place, and the water outlet is in the back, above the shield. The window glass is using tempered glass, with wind scoop. The working temperature can be 100°C. Compressed air bring in from the back of the shield, it can take parts of the heat. As the compressed air is coarse filtration, we suggest that clients install a fine filter before the air goes in the shield.

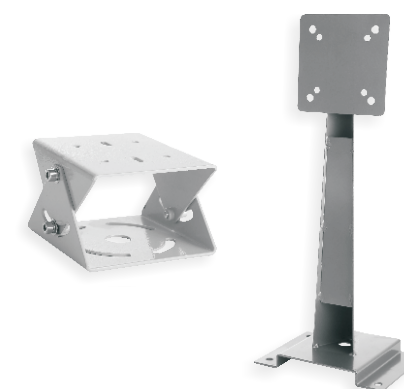
HL-E913H



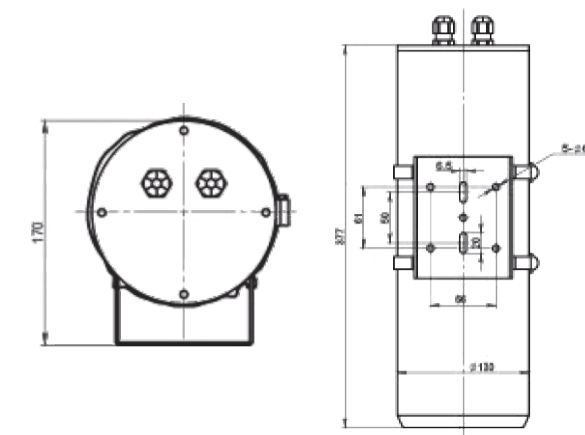
Products specification

Model	HL-E913HF
Material	stainless steel 304
Feature	Air-cooled air scoop structure, Resistant to environmental temperature 100°C
IP Grade	IP67
Window Resistant to temperature	<100°C
Compressed air pressure	>0.4MPa
Compressed air flow	10.5L/min
Visual size	100×5mm
Inside dimension	340×110mm
Outside dimension	400×131mm
Weight	6Kg
Cooling water and compressed air connector	Φ10mm hose coupler

Optional accessories



Installation Diagram



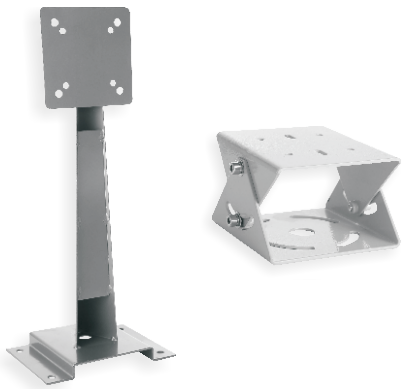
HL-E913H

Medium temperature Shield

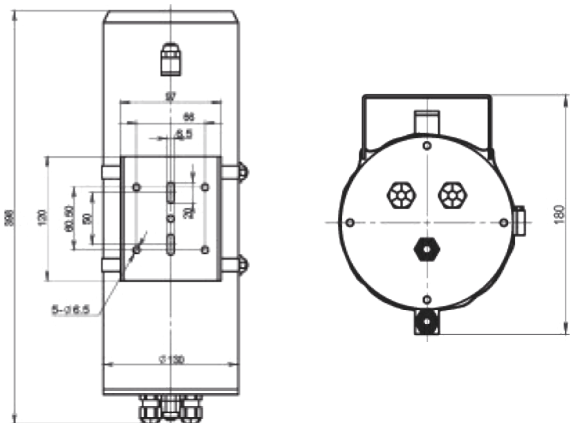


Special design, exclusive production.
 With stainless steel materiel, the water inlet is in the front of the shield, bottom place, and the water outlet is in the back, above the shield.
 The window glass is using tempered glass, with wind scoop.
 The working temperature can be 200°C.
 Compressed air bring in from the back of the shield, it can take parts of the heat.
 As the compressed air is coarse filtration, we suggest that clients install a fine filter before the air goes in the shield.

Optional accessories



Installation Diagram



Products specification

Model	HL-E913HS
Feature	With water-cooling and wind scoop, can work in 200°C
Material	Stainless steel 304
IP Grade	IP67
Window Resistant to temperature	<200°C
Cooling water entrance temperature	<35°C
Cooling water flow max	0.82M3/h
Cooling water working pressure	>0.25Mpa
Cooling water working pressure max	0.6Mpa
Inside dimension	335×110mm
Outside dimension	395×130mm
Weight	7Kg
Cooling water and compressed air connector	Φ10mm hose coupler

Anti Chemical corrosion Shield

HL-E600H

Anti Chemical corrosion Shield, exclusive production.

Products specification

Model	HL-E611H
Potential Of Hydrogen (at 60°C±20°C 5 hours)	40%NaOH±1g\m2(Sodium oxide) 40%HNO3±g\m2(hydrogen nitrate) 30%HSSO±1g\m2(Sulphuric Acid) 35%HCL±2g\m2(Hydrochloricacid) HF hydrogen fluoride Acetone soaking no beard hair: delaminating phenomenon
Material	Special industrial plastic, organic glass
IP Grade	IP68
Inner space	Fixed or small size zoom lens
Outlet hole quantity, specification	2pcs M20×105
Weight	1Kg
Feature	Using strong acid and alkali resistance and chemical corrosion performance of special engineering plastics

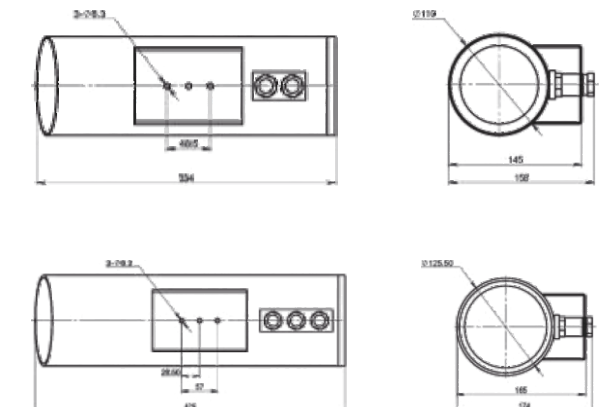
Model	HL-E613H
Potential Of Hydrogen (at 60°C±20°C 5 hours)	40%NaOH±1g\m2(Sodium oxide) 40%HNO3±g\m2(hydrogen nitrate) 30%HSSO±1g\m2(Sulphuric Acid) 35%HCL±2g\m2(Hydrochloricacid) HF hydrogen fluoride Acetone soaking no beard hair: delaminating phenomenon
Material	Special industrial plastic, organic glass
IP Grade	IP68
Inner space	Fixed or small size zoom lens
Outlet hole quantity, specification	3pcs M20×105
Weight	2KG
Feature	Using strong acid and alkali resistance and chemical corrosion performance of special engineering plastics



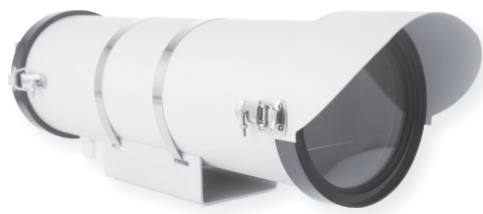
Optional accessories



Installation Diagram



HL-E212H



Automatic air conditioning all-weather shield

The latest technology, exclusive production all over the world.

Using the solid-state element which has Parr stick effect, both inside and outside with fan and heater. Controlled by the temperature measurement circuit, it can auto adjust the temperature.

Factory settings: Heat when the temperature is under 5°C, and refrigerate when it arrives over 40°C.

Suitable for different environment, especially for coastal areas and highway surveillance.

Can install fixed lens camera, zoom camera and small varifocal lens camera.

Auto- defrost: The window glass use Vacuum ion coating plant conducting glass, controlled by thermostat, factory setting as Heat when the temperature is under 5°C.

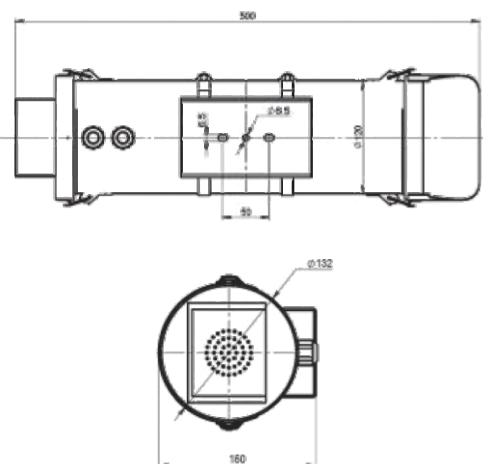
Invisible windshield wiper: The window glass is painted with invisible wiper film, it repels water, dusts and snow.

Heat shield: Prevent the heat conduction inside and outside, control the inside temperature in a safe range.

Optional accessories



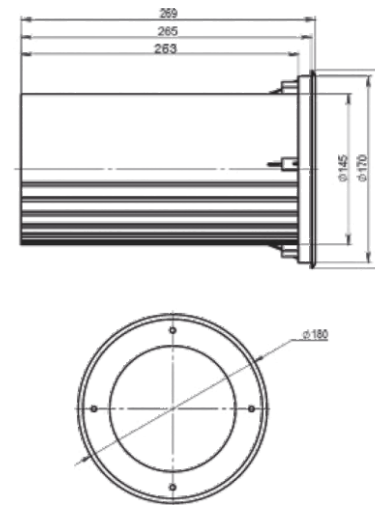
Installation Diagram



Products specification

Model	HL-E212H Automatic air conditioning all-weather protective cover
Voltage	AC220V(0.24A), DC12V optional
Electric current	≤3A
Material	Aluminum alloy
Weight	2KG
Feature	Automatic air conditioning, Window glass by vacuum ion coating conductive glass, Effectively prevent the dust, Sealing Well
IP Grade	IP68

Installation Diagram



HL-E113H



Products specification

Model	E113H
Voltage	DC12V
Electric current	≤3A
Outside Dimension	270×180mm
Inside dimension	150×123mm
Material	Aluminum alloy
Weight	3KG
The window glass	Vacuum ion coating conductive glass, +5°C below the conductive heating automatically, prevent Windows frost
Feature	Specially designed for monitoring under the chassis hidden characters, buried type design for toughened glass window is not afraid of pressure. With automatic air conditioning +5°C below the heating, refrigeration +40°C above
Work Temperature	-40°C ~ +65°C
IP Grade	IP68

Buried all-weather Automatic air conditioning shield

With Peltier Effect semiconductor solid-state element for cooling and heating, built-in fan and heater.

Auto adjust by temperature control circuit, can heating when the inside temperature is below 5°C and cooling when the temperature is over 40°C.

The test proved that the housing can work in temperature -40°C~65°C.

Auto defrost: the window glass is Vacuum ion coating plant conducting glass, with the temperature control, it will auto heating when temperature is below 5°C to prevent frosting.