

Explosion Proof Anti-Corrosion Dual Light Thermal Measurement Network Bullet Camera

Explosion Proof Mark

Ex II 2G Ex db op is IIC T6 Gb
II 2D Ex tb op is IIIC T80 °C Db IP68
IP66

Explosion-proof design

the camera has passed international ATEX certifications, and can be used in gas and dust hazardous scenarios

Material

316L stainless steel enclosure and anti-corrosion spray treatment, protecting the camera from damage caused by sparks or corrosive materials

Ingress Protection

IP68/IK08 water resistant and vandal proof, preventing water ingress for outdoor use

Key Features

4MP



- Uncooled coke plane detector, the sensitivity is better than 50 mk;
- Maximum resolution 640*512 / 384*288;
- Support point, line, area, full screen and screen temperature measurement and other temperature measurement methods;
- Supports various alarm methods such as exceeding high temperature, lower than low temperature, between and beyond;
- Support automatic tracking of high and low temperature cursor;
- Support the front-end temperature measurement of the device to reduce the pressure of the back-end server;
- supports 18 color palette displays, such as black hot, white hot, iron red and rainbow;
- Support H264 and H265 video compression algorithms;
- Supports RS485 and RS232 serial port communication;
- With the alarm input and output interface;
- Support RTSP, ONVIF, GB / T 28181, MODBUS and other protocols;
- 1T intelligent computing power, Supports deep algorithm learning to improve the performance of intelligent event algorithms
- Resolution :up to 2MP (2560*1440) ,Output Full HD :2560*1440@30fps Live Image.
- Support H.265/H.264/MJPEG Video Compression Algorithm ,Multi-level Video Quality Configuration and Encoding Complexity Settings
- Starlight Low Illumination, 0.0005Lux/F1.6(color),0.0001Lux/F1.6(B/W) ,0 Lux with IR ; 4X Optical Zoom, 16X Digital Zoom ; Support mobile detection
- Support 3-stream Technology, each stream can be independently configured with resolution and frame rate
- ICR automatic switching, 24 hours day and night monitoring ;
- Support Backlight Compensation, Automatic Electronic Shutter ,adapt to different monitoring environment
- Support 3D Digital Noise Reduction, High light Suppression, Electronic Image Stabilization, 120dB Optical Wide Dynamic
- Support 255 Preset,8 patrols;Support Timed Capture and Event Capture;Support One-click watch and One-click cruise functions
- Support 1 audio input and 1 audio output ; Built-in 1 alarm input and 1 alarm output, support alarm linkage function ; ONVIF

Thermal imaging parameters

Thermal imaging parameters	
Sensor Type	Uncooled focal plane detector
resolution Ratio	640×512@25fps 384×288@50fps
Like a Meta Size	14μ m 17um
Response Band	8~14μm
Noise Equivalent Temperature Difference	≤ 50mk(@25°C, F# =1.0)
Focal Distance	25mm /19mm /13mm 25mm /19mm /13mm
Angle of Field	25mm: 20.3°×16.3° 25mm: 14.9°×11.2°
	19mm: 26.6°×21.4° 19mm: 19.5°×14.7°
	13mm: 38°×30.8° 13mm: 28.1°×21.3°
Transient Field of View Angle	25mm: 0.560mrad 25mm: 0.680mrad
	19mm: 0.737mrad 19mm: 0.895mrad
	13mm: 1.077mrad 13mm: 1.308mrad
Palette	Iron red, rainbow, white hot, black hot and other 18 kinds of color palette
network	
Networking Protocol	TCP, UDP, RTP, RTSP, DHCP, PPPOE, UPNP, DDNS, FTP, ICMP, ONVIF, GB/T28181
Preview the Number of Videos Simultaneously	10
Video Compression Standard	H.264/H.265
picture	
Maximum Image Resolution	640×512@25fps 384×288@50fps
Master Substream Image	Max. 640*512 @ 25 fps Max of 384*288 @ 50 fps
Image Flip	Support for both horizontal and vertical flipping
function	
Temperature Measurement Range	-20°C ~ +550°C
Accurate Temperature Measurement	High precision: ± 2°C or ± 2% of the reading (take the maximum value of) *
Temperature Measurement Type	Support point temperature measurement, line temperature measurement, area temperature measurement, shielding temperature measurement and other ways, the parameters can be configured separately
Temperature Abnormal Alarm Intelligent Function	Above the maximum temperature / below the minimum temperature / between / outside Fire point fire alarm, trip the line, cross the line, intrusion alarm

Visible Camera Parameters

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Minimum Illumination	Color:0.0005 Lux @(F1.6,AGC ON);B/W:0.0001Lux @(F1.6,AGC ON)
Shutter	1/25s to 1/100,000s; Supports delayed shutter
Autoiris	DC
Day/Night Switch	IR cut filter
Digital Zoom	16X
lens	
Focal Length	8-32mm, 4X Optical Zoom
Aperture Range	F1.6-F2.5
Horizontal Field of View	40.26-14.34° (wide-tele)
Minimum Working Distance	100mm-1500mm (wide-tele)
Zoom Speed	Approximately 1.5s(optical lens, wide to tele)

Visible Camera Parameters

Compression Standard	
Video Compression	H.265 / H.264 / MJPEG
H.265 Type	Main Profile
H.264 Type	BaseLine Profile / Main Profile / High Profile
Video Bitrate	32 Kbps~16Mbps
Audio Compression	G.711a/G.711u/G.722.1/G.726/MP2L2/AAC/PCM
Audio Bitrate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/16-64Kbps(AAC)
	Image (Maximum Resolution: 2560*1440)
Main Stream	50Hz: 25fps (2560*1440, 1920 × 1080, 1280 × 960, 1280 × 720); 60Hz: 30fps (2560*1440, 1920 × 1080, 1280 × 960, 1280 × 720)
Third Stream	50Hz: 25fps(704 × 576); 60Hz: 30fps(704 × 576)
Image Settings	Corridor mode, saturation, brightness, contrast, sharpness adjusted by IE/ Client
BLC	Support
Exposure Mode	AE / Aperture Priority / Shutter Priority / Manual Exposure
Focus Mode	Auto Focus / One Focus / Manual Focus / Semi-Auto Focus
Area Exposure / Focus	Support
Optical Fog	Support
Image Stabilization	Support
Day/Night Switch	Automatic, manual, timing, alarm trigger
3D Noise Reduction	Support
Picture Overlay Switch	Support BMP 24-bit image overlay, customizable area
Region of Interest	ROI supports three streams and four fixed areas
NetWork	
Storage Function	Support USB extend Micro SD / SDHC / SDXC card (256G) disconnected local storage, NAS (NFS, SMB / CIFS support)
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,RTP,RTSP,RTCP,NTP,SMTP,SNMP,IPv6
Interface Protocol	ONVIF(PROFILE S,PROFILE G)

General Specifications

General	
Power	DC 12V±25%
Dimensions (L × W × H)	268*179*188mm
Net Weight	≤7kg
Material	Stainless Steel 316L
Working Environment	-40°C ~ 60°C , Humidity: ≤100% RH (non-condensing)
Storage Environment	-40°C ~ 60°C , Humidity: ≤100% RH (non-condensing)
Surge Protection	2KV
Ingress Protection	IP68
Inlet Hole	1 Entry hole G3/4"
Specification	
Installation Method	Wall or column platform installation
Approval	
Protection	IK08 (IEC 62262:2002), IP68 (IEC 60529-2013)
Explosion-Proof Protection	ATEX: II 2G Ex db IIC T6 Gb/ II 2D Ex tb IIIC T80°C Db IP68 IECEx: Ex db IIC T6 Gb /Ex tb IIIC T80°C Db IP68.For explosive gas atmospheres, the maximum surface temperature is 85°C; For flammable dust atmospheres, the maximum surface temperature is 80°C; IIC: for explosive gas atmospheres other than mines susceptible to firedamp;For explosive gas mixture atmospheres: Zone 1, Zone 2, Zone 21, Zone 22.

Application Scenarios



Oil & Gas



Refineries & Fuel Depots



Surveillance & Security



Chemie & Pharma



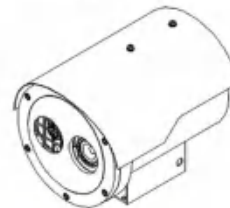
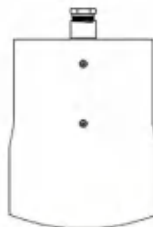
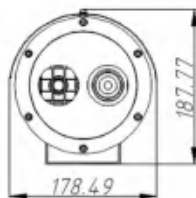
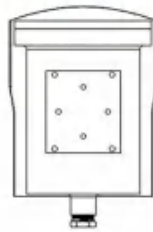
Oil tankers

Group II (Gas & Dust)	ATEX / IECEx / EAC-Ex				
Zone	0	1	2	21	22
Application	✗	✓	✓	✓	✓

Group I (Mining)	ATEX / IECEx..	
Category	Ma	Mb
Application	✗	✗

Other application areas : desert drill sites , offshore rigs , mechanical engineering ,biogas plants , military, electric power, hydraulic power, railway, metallurgy, natural gas extraction, drilling platform, aerospace, marine, armed police, border defense ,vessels ,fireworks production ,ports etc

DIMENSIONS



Accessories



Bracket



Ex-Proof Hose



Ex-Proof Junction Box