



4MP Explosion Proof Anti-Corrosion IR Small Bullet IP 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.

Material

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

Explosion proof design

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

Ingress protection

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

Key features

4MP

Ultra
H.265

WDR

IP68

IK 10

Smart Intrusion
Prevention

PoE

IRFA

- High quality image with 4MP, 1/3.0"CMOS sensor
- 4MP (2560*1440)@25/20fps; 3MP (2304*1296)@30/25fps; 2MP (1920*1080)@30/25fps
- Ultra H.265, H.265, H.264
- Smart IR, up to 30m (98') IR distance
- Day/night functionality
- 2D/3D DNR (Digital Noise Reduction)
- Supports Micro SD card
- IR-Cut Removable (ICR) Filter for Day/Night switching High-efficiency infrared/white light array lamp, low thermal energy, low power consumption

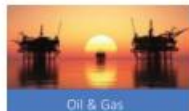
Specification

KDM-EX-FL428IR02

Camera		
Max Resolution	4 MP	
Sensor	1/3.0"CMOS	
Min.Illumination	Colour:0.01 lux(F2.1,AGC ON),0 lux with IR on	
Day/Night	IR-cut filter with auto switch (ICR)	
Shutter	Auto/Manual,1~1/100000s	
S/N	>52dB	
WDR	DWDR	
Lens		
Focal Length	2.8mm	4mm
Iris	F2.1	
Field of View (H)	97.0°	79°
Field of View (V)	52.2°	42.3°
Field of View (D)	107.5°	85.1°
DORI		
DORI Distance (Lens)	2.8mm	4mm
DORI Distance (Detect)	63.0m(206.7ft)	90.0m(295.3ft)
DORI Distance (Observe)	25.2m(82.7ft)	26.0(118.1ft)
DORI Distance (Recognize)	12.6m(41.3ft)	18.0m(59.1ft)
DORI Distance (Identify)	6.3m(20.7ft)	9.0m(29.5ft)
Illuminator		
Supplemental Light	IR	
Illumination Distance (IR)	30 m(98.4 ft)	
Wavelength	850 nm	
IR On/Off Control	Auto/Manual	
Video	Description	
Video Compression	Ultra 265,H.265,H.264	
H.264 Code Profile	Baseline profile,Main profile,High profile	
FrameRate	Main Stream:4MP (2560*1440),Max 25fps;3MP(2304*1296),Max,25fps;	
	2MP(1920*1080),Max 30fps	
	Sub Stream:D1(720*576),Max 30fps;640*360,Max 30fps;2CIF(704*288),Max 30fps;CIF(352*288),Max 30fps	
Video Bit Rate	128 Kbps~6144 Kbps	
U-code	Support (Main stream)	
OSD	Up to 4 OSDs	
Privacy Mask	Up to 4 areas	
ROI	Support	
Video Stream	Dual Streams	
Image		
White Balance	Auto,Outdoor,Fine Tune,Sodium Lamp,Locked,Auto2	
Digital Noise Reduction	2D/3D DNR	
Smart IR	Support	
HLC	Support	
BLC	Support	
Defog	Digital Defog	
Events		
Basic Detection	Motion Detection,Tampering Alarm,Audio Detection	
General Function	Watermark,IP Address Filtering,Access Policy,ARP Protection,RTSP Authentication,User Authentication, HTTP Authentication	
Network		
Protocols	IPv4,IGMP,ICMP,ARP,TCP,UDP,DHCP,RTP,RTSP,RTCP,RTMP,DNS,DDNS,NTP,FTP,UPnP,HTTP,HTTPS, QoS,SSL/TLS,SMTP,SNMP	
Compatible Integration	ONVIF (Profile S,Profile T),API,SDK	
User/Host	Up to 32 users.3 user levels:administrator,common user and operator	
Security	Password Protection,Strong Password,HTTPS Encryption,Export Operation Logs,Basic and Digest Authentication for RTSP,Digest Authentication for HTTP,WSSE and Digest Authentication for ONVIF	

Interface	
Serial Port	N/A
Built-in Mic	Support
Built-in Speaker	N/A
WIFI	N/A
Network	1x RJ45 10M/100M Base-TX Ethernet
Video Output	N/A
General	
Power supply	DC 12 V±25%, POE optional
Dimensions(LxWxH)	170*140*139mm
Net weight	≤2.5Kg
Materials	Stainless steel 316L
Working environment	-40℃ To -60℃, Humidity: ≤100%RH (non-condensing)
Production environment	-40℃ to -60℃, Humidity: ≤100%RH (non-condensing)
Surge protection	2 KV
Intrusion prevention	IP68
Infrared Distance	30m
Approved	
Protection	IK08 (IEC 62262:IP68 (IEC 60529-2013))
Explosion protection	ATEX: II 2G Ex db IIC T6 Gb / II 2D Ex tb IIIC T80℃ Db IP68 For explosive gas atmospheres, the maximum surface temperature is 85℃. Flammable dust atmosphere with a maximum surface temperature of 8℃; IC: Explosive gas atmospheres other than mine fires; Explosive gas mixture environment: Sector 1, Sector 2, Sector 21, Sector 22.
Verification to	BS EN 62676-1-1-2014 – Video surveillance systems for use in security applications

APPLICATION SCENARIOS



Oil & Gas



Refineries & Fuel Depots



Surveillance & Security



Chemie & Pharma



Oil tankers

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.

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

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