

COMPLETE PROTECTION
WITH SUPERIOR DESIGN
INSIDE & OUT
HIKVISION
EXPLOSION-PROOF PRODUCTS







HIKVISION EXPLOSION-PROOF PRODUCTS

Security cameras and other video surveillance technologies are finding new applications in every sector of science, business, and daily life, providing automated services and data in ways that were only imagined a few years ago. These intelligent functions extend the reach of human capabilities by putting cameras into settings that are often unsafe for people.

As a result, camera designs needed to incorporate protection from the environment for the camera's safety. And now, in specialized applications such as a chemical plant containing combustible gases, protection from the camera for the environment's safety has become an important issue. In the event a camera causes some kind of hazard in these areas, that camera must be prevented from causing a larger emergency. This need has given rise to the Explosion-proof Video Surveillance Camera, built to contain a serious malfunction within the camera body so as not to set off a chain reaction.

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Contine reading to learn how this technology works.







■ The Three Ingredients of Combustion

- Explosive substances (Combustible gases & solids)
- Combustion-supporting gases (Oxygen)
- Combustion source (Sparks or flames)

■ How to Prevent Explosions

We know that there are three ingredients necessary for combustion. The explosive substances and combustionsupporting gas are the external factors we cannot control. But we can control the internal factor: the **combustion source**



Explosive substances (Combustible gases & solids)



Combustion-supporting gases (Oxygen)



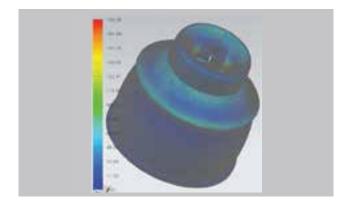
Combustion source (controllable factor: Sparks or flames)

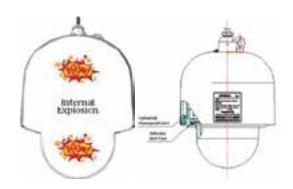
■ Flame-Proof Principle

1) Explosion Resistance

Hikvision Explosion-Proof Series Cameras are housed in 304/316L stainless steel, with a thickness of more than 3.5 mm. Using ANSYS for finite element force analysis, the housing can withstand 1.5 times internal explosion pressure. There is no breaking or permanent deformation after an internal explosion.

2) These cameras use flame-proof housing to prevent failure. The cylindrical flameproof joint and adhesive joint face prevent flames or sparks from escaping out of the camera when an explosion happens.





Application Scenarios

Hikvision Explosion-Proof Series Cameras are equipped with explosion-proof housing which is made of Stainless Steel (304/316L stainless steel). It can be widely used in places such as: Oil/Gas fields, wharfs, petrochemical plants, military industries, and more.

























Product Features



DS-2XE6242F-IS DS-2XE6242F-IS/316L

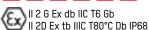
4MP Explosion-Proof Network Bullet Camera











- Up to 4 Megapixel high resolution
- 4, 6, 8, 12, and 16 mm lens options
- Supports 120 dB Wide Dynamic Range
- Supports H.265, H.265+, H.264, H.264+
- Supports three video streams simultaneously
- Supports 6 behavior analyses, 2 anomaly detections, 1 recognition
- Supports on-board storage up to 128 GB
- Housing material: Stainless Steel 304 (316L: -/316L)
- IR range: 30 m
- 100 VAC to 240V / PoE



DS-2XE6222F-IS DS-2XE6222F-IS/316L 2MP Explosion-Proof Network Bullet Camera









- Up to 2 Megapixel high resolution
- 4, 6, 8, 12, 16 mm lens optional
- Supports 120 dB Wide Dynamic Range
- Supports H.265, H.265+, H.264, H.264+
- Supports three video streams simultaneously
- Supports 6 behavior analyses, 2 anomaly detections, 1 recognition
- Supports on-board storage up to 128 GB
- Housing material: Stainless Steel 304 (316L: -/316L)l
- IR range: 30 m
- 100 VAC to 240V / PoE



DS-2DF6223-CX(W) 2MP Explosion-Proof Network Speed Dome











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

- 2 MP 1/1.8" progressive scan CMOS
- Up to 1920 x 1080 resolution
- 23x Optical zoom; Focal length: 5.9 mm to 135.7 mm
- Min. illuminations Color: 0.005Lux @(F1.5, AGC ON), B/W: 0.0005Lux @(F1.5, AGC ON)
- IR cut filter with auto switch
- 3D DNR, low bitrate, 120 db WDR
- Explosion-Proofing: II 2 G Ex td IIC T6 Gb, Ta -40 - 60°C II 2 D Ex tb IIIC T80°C Db
- IP68 standard protection rating
- Supports three streams simultaneously



Coming Soon

DS-2XE6422FWD-IZHRS DS-2XE6452F-IZHRS EXIR VF Bullet

- 2 MP /5MP
- Support H.265/H.265+
- DarkFighter (2 MP), 2.8~12mm, 8~32mm(2 MP)
- Up to 150m (8~32mm) / 80m(2.8~12mm)
- IP68 standard
- 316L stainless steel
- NEMA 4X, C5-M, ATEX,IECEX standard
- R:Wiper







ATEX Authentication

ATEX Authentication includes 'Gas Explosion-proof Sign' and 'Dust Explosion-proof Sign' Ex db IIT6 Gb (4) 3 (3) (6) 0 Temperature Maximum surface Classification of Classification of Gas EX: Explosion protected Distinction of temperatura Electrical apparatus Class A: Example: Ex-mark type: Equipment \$450°C Group I: propane, hexane, d: Flameproof type Protection £300°C Bectrical apparatus for benzene, gasoline, e: Increased safety \$200 C mines susceptible to ethanol, acetaldenyde, type: c135 C acetone, methylamine fredamp i: Intrinsic safety type: \$100 C Group II: Electrical Class B: Example: Pr. Pressurized type: 16 (85 C apparatus for places ethylene, dimethyl other, D. Dil. immersion type with an explosive gas a: Powder filling type coke oven gas n: Type of protection atmosphere other than Class C. Example: rones susceptible to hydrogen, soetylene, m: Encapsulation fredomp carbon disulphide type Gas Explosion-proof Sign Œ G D Π (3) (3) (6) 0 Equipment categories It is conformity. Code of Categories of electrical equipment certified body to the Class L Can be used in zone 0 Can be used in zone 20 Ex-mark of ATEX Electrical apparatus for coal mine Can be used in zone 1 Can be used in zone 21 Can be used in zone 2 Can be used in zone 22 drective Class 8: Other electrical apparatus for explosive gas atmospheies except coal mine **Dust Explosion-proof Sign** Equipment protection levels 8 using area T80 C Ex IIIC Db tb



Ex-mark

EX









Casses of Electrical apparatus for explosive dust atmospheres INA, INB, INC

Maximum surface temperature

Distinction of Equipment protection

Equipment protection levels		using area
	Ga	Zane 2
	(b	Zone 1
	- BC	Zorie 2
	Do	Zone 20
	.06	Zone 21:
	Do:	Zone 22

Hikvision ATEX authentication







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پارس ارتباط افزار تنها نماینده رسمی HIKVISION در ایران





پارس ارتباط افزار

تهران، خیابان شهید بهشتی، خیابان سرافراز، کوچه سوم، پلاک ۱۲

تلفن: ۵۲ ۱ – ۲۱ ۰

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