

EX52 Explosion Protected Compact Camera



- Designed and certified for effective explosion protected performance at hazardous locations
- ► Class I, II, III, Div. 1, 2, Groups A, B, C, D, E, F, G, T6
- ► Small, compact design
- ► Heavy duty extruded aluminum construction
- Easy access optical slide tray
- ▶ 3/8 in. chemically resistant window

The EX52 is a 30 cm (12 in) explosion protected camera for effective surveillance at high risk environments. Designed for hazardous industrial locations, including the entire range of OSHA (UL). Its stringent Class I, Division I certifications allow safe functioning at locations where ignitable concentrations of flammable gases or liquid vapors are present during normal operation. Groups covered include acetylene, hydrogen, ethylene and methane, all highly explosive gases. The EX52 is also certified for operation in areas where ignitable concentrations of combustible dusts (such as carbon-based or agricultural dusts) are present during normal operation

The EX52 is also designed to CCTV industry standards for mounting hardware and motorized pan/tilt devices.

Functions

Applications

- Chemical factories
- Petroleum refineries, oil and gas processing
- Utility gas plants
- Grain elevators, flour mills
- Dry cleaning plants
- Pharmaceutical plants
- Coal and carbon processing
- Aircraft hangars
- Spray finishing areas

• Munitions and fuel storage facilities

Note

The use of explosion protected housings may be subject to local or regional regulatory approval. The authorities having jurisdiction for each installation and application may vary and their respective requirements may differ. The integration of your equipment with the EX52 may also be subject to local authority approval.

Certifications and Approvals

Region	Certification
Canada	CSA
CSA-NRTL	LR 113310
Class	9098 01 / 81 Miscellaneous - for Hazardous Locations
Safety	OSHA / ANSI / UL / CSA
	UL 508, Sixteenth Edition - Industrial Control Equipment
	UL 698, Eleventh Edition - Industrial Control Equipment for Use in Hazardous (Classified) Locations
	UL 1203 Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
	CSA C22.2 No.0-M1991 General Electrical Requirements

	CSA C22.2 No.0.4-M1982 Bonding and Grounding of Electrical Equipment (Protective Grounding)
	CSA C22.2 No.25-M1966 Enclosures for Use in Class II Groups E, F, and G Hazardous Locations
	CSA C22.2 No.30-M1986 Explosion-proof Enclosures for Use in Class I Hazardous Locations
	CSA C22.2 No.94-M1991 Special Purpose Enclosures
	CSA C22.2 No.142-M1987 Process Control Equipment
	Class I, Div 1, 2, Groups A, B, C, D
	Class II, Div 1, 2, Groups E, F, G
	Class III
Operational	Temperature Code T6 at maximum ambient temperature 50°C (122°F)
Environmental	CSA / NEMA TYPE 4

Technical Specifications

Photocell-Controlled Mechanical Filter Cameras, Day / Night Switching

Image Sensor	MX4 Extended Day/Night CCD	
Resolution	540TVLcolor/540TVLmonochrome	
Effective Pixels NTSC (HxV)	768 x 494	
Effective Pixels PAL (HxV)	752 x 582	
Sensitivity	0.02 Lux with F1.4 lens / 0 lux with infrared (B/W)	
S/N Ratio	Greater than 48 dB (AGC off)	
Output Signal	1 Vpp, 75 Ohm	
Gamma	0.45	
Gain Control	AGC	
Electronics Iris	1/60 to 1/100,000 (NTSC) • 1/50 to 1/100,000 (PAL)	
Filter	Dual-window mechanical type	
Consumption	5 W maximum	
Voltage	12 to 24 AC/DC	
Construction	Robust aluminum extrusion with four ¾ in NPT conduit entries	
Brackets	U-Bracket with stainless steel straps included	
View Window	Copper-free tempered view window	
Weight	4.5 kg (10 lbs) without camera	
Operational Range	-50°C to +50°C (-58°F to +122°F)	
Overall Dimension	Approximately 86 mm (3 3/8 in) di-	
	ameter x 305 mm (12 in) length	
Color Cameras	ameter x 305 mm (12 in) length	
Color Cameras Image Sensor	ameter x 305 mm (12 in) length C7 High Resolution Color CCD	
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Image Sensor	C7 High Resolution Color CCD	
Image Sensor Resolution	C7 High Resolution Color CCD 500 TVL	

S/N Ratio	Greater than 48 dB
Output Signal	1 Vpp, 75 Ohm
Gamma	0.45
Gain Control	AGC
Electronics Iris	1/60 to 1/100,000 (NTSC) / 1/50 to 1/100,000 (PAL)
Consumption	5 W maximum
Voltage	12 to 24 AC/DC
Construction	Robust aluminum extrusion with four ¾ in NPT conduit entries
Brackets	U-Bracket with stainless steel straps included
View Window	Copper-free tempered view window
Weight	4.5 kg (10 lbs) without camera
Operational Range	-50°C to +50°C (-58°F to +122°F)
Overall Dimension	Approximately 86 mm (3 3/8 in) diameter x 305 mm (12 in) length

Ordering Information	
EX52C7V0409-N Explosion Protected Compact Camera Explosion protected cam, 1/3 in. hi-res color, 500TVL, 4-9 mm lens, NTSC	EX52C7V0409-N
EX52C7V0409-P Explosion Protected Compact Camera Explosion protected cam, 1/3 in. hi-res color, 500TVL, 4-9 mm lens, PAL	EX52C7V0409-P
EX52MX4V0409-N Explosion Protected Compact Camera Explosion protected cam, 1/3 in. extended day/night, 540/540 TVL, 4-9 mm lens, NTSC	EX52MX4V0409-N
EX52MX4V0409-P Explosion Protected Compact Camera Explosion protected cam, 1/3 in. extended day/night, 540/540 TVL, 4-9 mm lens, PAL	EX52MX4V0409-P
EX52C7V0922-N Explosion Protected Compact Camera Explosion protected cam, 1/3 in. hi-res color, 500 TVL, 9-22 mm lens, NTSC	EX52C7V0922-N
Compact Camera Explosion protected cam, 1/3 in. hi-res color,	EX52C7V0922-N EX52C7V0922-P
Compact Camera Explosion protected cam, 1/3 in. hi-res color, 500 TVL, 9-22 mm lens, NTSC EX52C7V0922-P Explosion Protected Compact Camera Explosion protected cam, 1/3 in. hi-res color,	

Ordering Information			
Accessories			
EXPS.008 VAC Power Supply Power supply 120 VAC/ 24 VAC 1500 mA	EXPS.008		
EXMB.004B Ceiling and Pedestal Bracket Mounting Bracket, HD, Pan/Tilt Adjust - Ceiling Mount for EX52, EX62, black	EXMB.004B		
EXMB.005B Heavy Duty Wall Bracket Mounting Bracket, HD, Pan/Tilt Adjust - Wall Mount for EX63, black	EXMB.005B		
EXMB.002B Ceiling and Pedestal Bracket Ceiling and Pedestal Bracket, Black	EXMB.002B		
PSU-230-24 Power Supply Power Supply, 230 VAC / 24 VAC, 50 W	PSU230-24		

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