



The EX70N series are tough, compact, explosion protected Integrated Day-Night™ cameras for effective 24/7 surveillance in hazardous environments.

The EX70N series is certified for Class I, Division 1 environments, the most stringent safety standards for explosion-protected performance. In addition, the EX70N series is now available with day-night mechanical filter CCDs for outstanding daytime color and 40ft (12m) active infrared night vision under low light conditions.

The EX70N series delivers safety and performance while minimizing operational risks for applications including oil and gas, chemical and pharmaceutical facilities.

Performance Benefits

- Explosion protected design for ATEX and UL/CSA-certified safe Class I, Class II, Div. 1 and Div. 2 performance at even the most hazardous locations
- Award-winning electro-optics for effective monitoring of people and processes, with mechanical filter CCDs now available for vivid daytime color and outstanding IR sensitivity
- Integrated Day-Night™ design for up to 40ft (12m) active-infrared night vision in 0 lux
- Small, compact housing, NEMA 4X rated for indoor and outdoor performance
- Fast installation with various fixed lens options, 12VDC / 24VAC input voltage and optional pan-tilt brackets

Key Attributes



Certified Explosion Protected Design

- ATEX and UL and CSA certified for explosion protected performance
- Class I, Division 1 & 2, Groups B, C, D
- Class II, Division 1 & 2, Groups E, F, G
- Class III
- T6 temperature code

Performance Optics

- Performance CCDs with mechanical filter technology
- High efficiency LED infrared array
- 40ft (12m) active-infrared night vision
- Enables effective surveillance in low light environments
- Optional LXR CCD provides higher IR sensitivity, low smear, low streak and excellent anti-blooming characteristics

Compact Ruggedized Construction

- Small, unobtrusive and discreet housing
- NEMA 4X rated for indoor and outdoor performance
- High-strength reinforced aluminum construction strong enough to withstand an internal explosion.
- Threaded flame paths extinguish burning explosive gases, allowing them to exit the housing harmlessly, without risking ignition in the external environment

Installer-Friendly Features

- Various fixed lens options 3.6mm to 12mm
- 12VDC / 24VAC operation
- Standard EXMB.070 adaptor plate for installation versatility
- Optional pan-tilt brackets
- Optional wall and pole adaptor plates

Active-Infrared Night Vision Sample Images

Active-Infrared OFF



Active-Infrared ON



An illustration of active-infrared illumination. In the "IR off" image at left, very little information is available. However, the "IR on" image at right demonstrates the effect of adding infrared on scene. Details are clearly visible and the image may be used as evidence in a court of law.

EX70N Installation Tip



Pole Mount Brackets

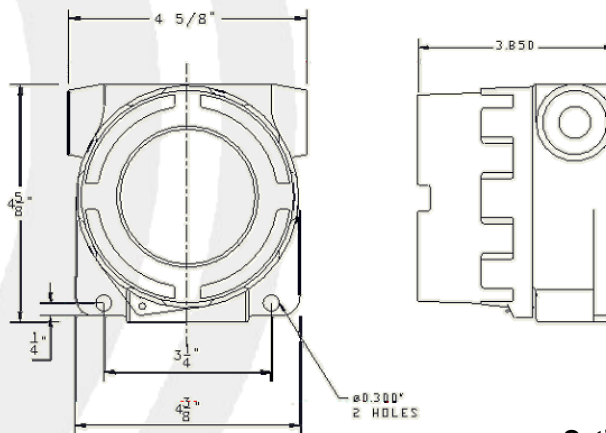
The EX70N series cameras may be combined with the EXMB.070 Adaptor Bracket, EXMB.028 Wall Mount Bracket and EXMB.015 Pole Mount Adaptor for a quick and easy installation to a pole. (All brackets sold separately)

EXMB.070 Adaptor Bracket

EXMB.028B Wall Mount Bracket

EXMB.015 Pole Mount Adaptor

Technical Drawings



Part Numbers

Model	EX70MNX	8	4	04
LED Wavelength	8: 850 nm			
Camera	3: EX70N - S3 4: EX70NX -SX4 4: EX70MN - M4 4: EX70MNX - MX4			
Compatible Lenses	04: 3.6 mm 05: 4.3 mm 06: 6.0 mm 08: 8.0 mm 12: 12.0 mm			

Optional Accessories

- [EXPS.001](#) Power Supply Unit
- [EXMB.002](#) Ceiling and pedestal bracket
- [EXMB.003](#) Heavy-duty wall bracket
- [EXMB.006](#) Wall bracket
- [EXMB.007](#) Heavy-duty wall bracket
- [EXMB.015](#) Pole mount adaptor
- [EXMB.028](#) Wall mount adaptor plate
- [EXMB.070](#) Adaptor Bracket for EX70 Series

Certifications

	EX70N Explosion Protected Surveillance Camera
CSA/NRTL	LR 113310
Class	2258 / 82 - Process Control Equipment - For Hazardous Locations - Certified to US Standard
	2258 / 02 - Process Control Equipment - For Hazardous Locations
Safety	OSHA / ANSI / UL / CSA
	UL 508, 16 th Edition - Industrial Control Equipment
	UL 698, 11 th Edition - Industrial Control Equipment for Use in Hazardous (Classified) Locations
	UL 1203, 2nd Edition - Explosion-Proof and Dust-Ignition-Proof Elec. Eqmt for Use in Hazardous (Classified) Locations
	CSA C22.2 No.0-M1991 - General Requirements - Canadian Electrical Code Part II
	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, Division 1 and 2, Groups B, C, and D
	Class II, Division 1 and 2, Groups E, F, G
	Class III
	ATEX Ex II 2G certified – Equipment or Protective System intended for use in Potentially Explosive Atmospheres; Directive 94/9/EC
ATEX Ex d IIC T6 certified– Equipment or Protective System intended for use in Potentially Explosive Atmospheres; Directive 94/9/EC	
Operational	Temp Code T6 (At ambient operational temperature of 40°C, the maximum unit surface temp will not exceed 85°C.)
Environmental	CSA / NEMA TYPE 4X

Specifications

	EX70N Mono	EX70NX Mono	EX70MN Day-Night	EX70MNX Day-Night
CCD	1/3" S3 High Resolution	1/3" SX4 LXR Performance IR	1/3" M4 Mechanical Filter	1/3" MX4 LXR Mechanical Filter
Resolution	600 TVL mono	420 TVL mono	550 TVL color / 570 TVL mono	550 TVL color / 570 TVL mono
IR Spectral Response	Standard IR Sensitivity	Enhanced IR Sensitivity	Standard IR Sensitivity	Enhanced IR Sensitivity
Day Sensitivity	0.05 Lux @ F1.4	0.01 Lux @ F1.2	0.06 Lux with F1.4 lens	0.02 Lux with F1.4 lens
Night Sensitivity	0 Lux - works in darkness	0 Lux - works in darkness	0 Lux - works darkness	0 Lux - works in darkness
S/N Ratio	Greater than 48 dB	Greater than 48 dB	Greater than 48dB (AGC off)	Greater than 48dB (AGC off)
Night Vision Dist.	30ft (9m)			40ft (12m)
Lens Options	3.6mm, 4.3mm, 6.0mm, 8.0mm and 12mm fixed lenses			
Output Signal	1Vp-p, 75Ω			
Electronics Iris	1/60 ~ 1/100,000 (EIA)			
LED	18-LED high efficiency array, 850nm			
Voltage	12 VDC or 24 VAC			
Cabling holes	3/4" NPT			
Construction	Sand-cast, copper-free aluminum			
Flame Path	Threaded joint flame paths			
Temp Range	-50°C to +40°C (-58°F to 104°F)			
Weight	3.1lbs (1.4kg)			
Dimension	117 mm x 117 mm x 99 mm 4.6" x 4.6" x 3.9"			

Important Note:

- Explosion-protected housings may be subject to local or regional regulatory approval. Please check with your local authorities having jurisdiction.