

Explosion Proof Network IP Camera w/ Built-in Infrared - 4.0MP, 20FPS - PoE + 120-240V AC - TCP/IP

## EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



### EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227 Network Explosion Proof Camera

Listing: United States and Canada **Dimensions: -**Weight: -Camera Watts: 5W (Max) Infrared Light Watts: 12W Camera Power Source: PoE (802.3af) Infrared Light Voltage: 120-240V AC Image Sensor: 1/3" Progressive Scan CMOS Sensor Signal System: NTSC Video Resolution: 4.0MP (2688\*1520) Frame Rate: Up to 20fps @ 2688\*1520 Resolution Compression Type: H.264, H.264 OVC, MJPEG Bit Rate: 32Kbps - 16Mbps Focal Length: 4mm Max Field of View: 83° Shutter Speed: 1/3s to 1/10,000s Min. Illumination: 0.01 lux (Color) / 0 lux (w/ Built-in IR) Infrared Wavelength Options: 750 nm, 850 nm or 940 nm Infrared Beam Pattern: Flood or Spot IR Spot Beam: 120`L x 60`W IR Flood Beam: 80<sup>L</sup> x 80<sup>W</sup> Day/Night: True D/N w/Mechanical Cut Filter Digital Noise Reduction: 3D DNR Ethernet Interface: RJ45 Ethernet Speed: 10/100 Protocols: TCP/IP, HTTP, HTTPS, DHCP, UDP, RTP, RTSP and more Infrared Light Control: Modbus TCP/IP Network Programmable (On/Off, Scheduling and Network Functions) Remote Configuration: Yes Ambient Temperature Range: -22°F to +140°F

### Housing Materials: Copper-free Aluminum Alloy Lens Material: 3/8" Thick Tempered Glass

Mounting: Adjustable rear-mounted handle/bracket

Wiring Hub: (2) 3/4" NPT

## <u>Ratings / Features</u>

Listed for United States & Canada Class I, Divisions 1 & 2, Groups B, C, D Class I, Zones 1 & 2, Groups IIB+H2, IIA Class II, Divisions 1 & 2, Groups E, F, G Class III, Divisions 1 & 2 NEMA 3R, 4, 7 (B, C, D), 9 (E, F, G) NRTL Listed to UL 508A NRTL Listed to UL 1203 NRTL Listed to CSA C22.2 No 14, 25, 30 Main steam and two sub streams Capable of programming unique settings per stream ONVIF Profile S Certified WDR (wide dynamic range) for auto adjusting TCP/IP Infrared Light Control

## <u>Special Orders/Requirements</u> Contact us for special requirements

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The EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227 Network Explosion Proof Camera w/ Built-in Infrared Light from Larson Electronics is a remote inspection camera specifically designed for observation in hazardous



locations. This explosion proof, dust/ignition proof, weather proof and tamper resistant camera provides the operator with a live feed from inside tanks, reactors, vessels or other hazardous locations. Operated remotely from a centralized control room, this remote inspection camera saves both time and money as well as contributing to workplace safety. Camera Features: The EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227 Network Explosion Proof Camera features a built-in 1/3" progressive-scan CMOS image sensor that delivers up to 4.0MP resolution at 20 fps. The wide angle fixed lens with 83° field of view is designed to cover large areas and work spaces. This explosion proof camera provides a crisp and clear image for everything within the 83° focal area. Total distance is dependent on mounting height and angle. The monitoring device comes with built-in infrared lights to support image capturing in low-light conditions and after sunset. This component is available in two lighting configurations: spot and flood. Four Edison Edixeon® three watt LEDs producing 180 lumens each are arranged in rows and paired with high purity 10 degree optics to produce a tightly focused spot beam with limited spread or light spillage. The spot configuration features a  $10^{\circ}$  beam that measures 120 L x 60 W. The flood configuration throws a 35° beam that measures 80  $L \times 80 W$ . The explosion proof infrared light is powered using a customer-provided 120-240V AC power source, while the explosion proof camera is powered by PoE. This remote inspection camera utilizes 120dB true Wide Dynamic Range, 3D Digital Noise Reduction and a true day/night IR-Cut Filter Removal to produce clear images in variable and low light conditions. The camera automatically switches from full color to IR mode when visible light falls below a certain level. Modbus TCP/IP (Infrared Light): On/off, scheduling and network features for the explosion proof infrared light are facilitated via Modbus TCP/IP protocol. This remote setup enables operators to apply custom schedules and configurations for the infrared light, such as operation during after hours, integration with a dav/night photocell and more.

**Wiring:** Link-up with the camera is achieved via a customer provided RJ45 Ethernet cable which is ran back to the customer provided DVR system mounted outside the hazardous location. Camera power is delivered via the same Ethernet cable using Power over Ethernet (PoE) technology. This not only increases flexibility in deployment, but also provides time and cost savings as well. Our explosion proof cameras with Power over Ethernet (PoE) features enable data transfers and power to be passed through a single Ethernet cable that is usually a Cat 3/Cat 5 cable or better. There are several types of PoE, which come with their own respective standard and maximum power to port capabilities. The IEEE 802.3af PoE standard, with a voltage range of 44.0 - 57.0V, offers 15.4W of DC power for each port. The IEEE 802.3at PoE standard, with a voltage range of 50.0 - 57.0V, provides up to 30W of DC power per port, which is ideal for surveillance cameras, antennas and network access points. The IEEE 802.3bt PoE standard, with a voltage range of 50.0 – 57.0V, provides 60W of DC power for each port. In order to utilize PoE properly, the components, such as the receiving unit and sending device, must be PoE compliant.

**Recording:** To record the stream from this camera, a NVR (network video recorder) is required. Larson Electronics provides a line of explosion proof, hazardous location, and non-classified NVR's to work in conjunction with this explosion proof camera. This camera is live-view capable without any NVR system via remote access to the camera. Three streams are available, one main stream for recording and two sub streams for live viewing or additional resources. Each steam can be configured to different resolutions and frame rates.

**Mounting:** The EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227 Network Explosion Proof Camera features an ATEX/IECEx certified copper-free aluminum alloy body and weighs a total of 12 pounds. The camera and infrared light includes an adjustable rear-mounted polished stainless steel mounting bracket/handle. Additional accessory pole mounts and magnetic mounts are available separately. **Applications:** Vessel, tank and reactor monitoring, remote observation of external facilities, monitoring of cleaning, spray patterns, mixing, foaming, reaction, and level.

#### Larson Electronics LLC 9419 E US HWY 175, Kemp, TX 75143 Phone: 800.369.6671



At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.



**Frequently Asked Questions (FAQ)** 



## **Options:**

# EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227-Beam Config-Wavelength Example: EXPCMR-IP-POE-4MP-IR-ANC-1XLE3-1227-FL-750NM

Beam Config			Wavelength	
FLOOD	-FL	750 NM	-750NM	
SPOT	-SP	850 NM	-850NM	
		940 NM	-940NM	



Links (Click on the below items to view):

- ATEX Certificate (European Explosion Proof)
- Canadian CEC Certificate (Commonly referred to as CSA Certificate)
- CE Certificate
- Certificate 1, Misc
- Certificate 2, Misc
- Certificate 3, Misc
- Certificate 4, Misc
- Eye Safety Information/Certificate
- IEC Ex Certificate (International Explosion Proof)
- MSDS (Material Safety Data Sheet
- RoHS Certificate (Restriction of Hazardous Substances)
- USA NEC Certificate (Commonly referred to as UL Certificate)
- HigResPic1
- Video1
- Video2
- Video3
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map