

## Explosion Proof Network IP Camera w/ Built-in LED Light - 8.0MP, 20FPS - PoE

EXPCMR-IP-POE-8MP-102D-1XLE1-1227

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



### EXPCMR-IP-POE-8MP-102D-1XLE1-1227 Network Explosion Proof Camera w/ LED

<u>Light</u>

Listing: United States and Canada

Dimensions: - Weight: 12 lb

Camera Watts: 5W (Max) LED Light Watts: 12W

Camera Power Source: PoE (802.3af) LED Light Voltage: 120/240 V AC

Image Sensor: 1/3" Progressive Scan CMOS Sensor

Signal System: NTSC

Video Resolution: 4K UHD 8.0MP (3840 x 2160) Frame Rate: Up to 20fps @ 3840 x 2160 Resolution

Compression Type: H.265+, H.265, H.264 OVC, H.264, MJPEG

Bit Rate: 32Kbps - 16Mbps Focal Length: 2.8mm Max Field of View: 102° Shutter Speed: 1/3s to 1/10,000s Min. Illumination: 0.01 lux (Color) LED Beam Pattern: 40° Flood or 10° Spot

**Spot Beam:** 800'L x 140'W **Flood Beam:** 300'L x 225'W

**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

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

#### Ratings / Features

NRTL 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

## **Special Orders - Requirements**

Contact us for special requirements

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The EXPCMR-IP-POE-8MP-102D-1XLE1-1227 Network Explosion Proof Camera w/ Built-in LED Light from Larson Electronics is a remote inspection camera specifically designed for observation in hazardous locations. This explosion proof, dust/ignition proof, weatherproof 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-8MP-IR-102D Network Explosion Proof Camera features a built-in 1/2.5" progressive-scan CMOS image sensor that delivers up to 4K 8.0MP resolution at 20 fps. The wide angle fixed lens with 102° 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 102° focal area. Total distance is dependent on mounting height and angle. The monitoring device comes with a built-in LED light to support image capturing in low-light conditions and after sunset. This component produces 1,320 lumens of high-intensity LED light for illumination within hazardous areas and potentially explosive work environments. The low voltage unit is available in two lighting configurations: spot or flood. The spot configuration features a 10° beam that measures 800'L and 140' W. The flood configuration throws a 40° beam that measures 300'L and 225'W. With a high color-temperature rating of 6,000K the handheld LED fixture offers improved detection of dangerous elements, obstructions and abnormal conditions in the surrounding area. LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases

to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life. LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods. such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps. 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. 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.

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**Mounting:** The EXPCMR-IP-POE-8MP-102D-1XLE1-1227 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.

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 <a href="mailto:sales@larsonelectronics.com">sales@larsonelectronics.com</a> for more information about our custom options tailored to meet your specific industry needs.



# **Frequently Asked Questions (FAQ)**



# **Options:**

EXPCMR-IP-POE-8MP-102D-1XLE1-1227-Beam Config Example: EXPCMR-IP-POE-8MP-102D-1XLE1-1227-FL

Beam Config		
FLOOD	-FL	
SPOT	-SP	_



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
- Dimensional Drawing 2D
- 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)
- Wiring Diagram (Oneline)
- HigResPic1
- Video1
- Video2
- Video3
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map