

# Explosion Proof Network IP 4K Camera - 8.0MP, Built-in IR - 20FPS - 102° FOV - Flex Coupler - IP66/N4X

## EXPCMR-IP-POE-8MP-IR-102D-FLX.23-JB.3.SFC

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



#### EXPCMR-IP-POE-8MP-IR-102D-FLX.23-JB.3.SFC Network Explosion Proof Camera Listing: United States, Canada, EU, International Camera Dimensions: 8.5" × 4.76" × 4.65" Camera Weight: Total Watts: 5W (Max) Power Source: PoE (802.3af) Image Sensor: 1/2.5" 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) / 0 lux (w/ Built-in IR) Infrared Light: Built-in 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: Ceiling, Surface or Corner

Mounting Components: 27.5" EXP Stainless Steel Flex Coupler, 3-port Junction Box w/ Surface Mount Tabs, 3/4" EYM Seal Off and Chico Fiber/Compound Mixture Wiring Hub: (2) 3/4" NPT

#### Quick Summary

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 Ex db IIC Gb Ex tb IIC Gb Db IP66 NEMA 3, 4, 4X, 7 (B, C, D), 9 (E, F, G) Main stream and two sub streams Capable of programming unique settings per stream ONVIF Profile S Certified WDR (wide dynamic range) for auto adjusting Junction Box Included

Special Orders/Requirements Contact us for special requirements Toll Free: 1-800-369-6671 Intl: 1-214-616-6180

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The EXPCMR-IP-POE-8MP-IR-102D-FLX.23-JB.3.SFC from Larson Electronics is a 4K UHD Network Explosion Proof Camera that is ideal to use as 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. Equipped with built-in infrared, this remote inspection camera saves both



# time and money as well as contributing to workplace safety. An explosion proof flex coupler, 3-port junction box and 3/4" EYM seal off and chico fiber/compound mixture are included with the unit.

**Camera Features:** The EXPCMR-IP-POE-8MP-IR-102D-FLX.23-JB.3.SFC 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 explosion proof unit comes with built-in infrared lights. For additional infrared illumination, an external infrared light can be used with the explosion proof device (not included). For 12-24V DC applications, we recommend the Larson Electronics 12-watt explosion surface-mount infrared LED light (<u>EXHL-TRN-LE3-IR-1224</u>). As an alternative, we also offer the <u>EXHL-TRN-LE3-IR-1227</u> for 120-240V AC applications.

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.

**Mounting:** The EXPCMR-IP-POE-8MP-IR-102D-FLX.23-JB.3.SFC Network Explosion Proof Camera can be mounted on ceilings, surfaces or around corners from conduit runs. A 27.5" explosion proof, stainless steel coupling with a 12" maximum bend radius ensures the camera can still be adjusted after permanent installations. The flex coupler is terminated inside an included explosion proof 3port junction box, which comes with surface mounting tabs for seamless setup. One pack of 3/4" EYM seal off and chico/fiber compound mixture is provided for sealing on the camera side of the flex coupler. This mounting solution addresses NEC code guidelines surrounding SOOW cords and permanent installations in combustible sites, while preserving the explosion proof camera's adjustable features.

**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 <u>sales@larsonelectronics.com</u> for more information about our custom options tailored to meet your specific industry needs.



**Frequently Asked Questions (FAQ)** 



### www.LarsonElectronics.com Email: sales@LarsonElectronics.com Fax: 903.498.3364

















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
- IEC Ex Certificate (International Explosion Proof)
- MSDS (Material Safety Data Sheet
- Operations Manual
- RoHS Certificate (Restriction of Hazardous Substances)
- USA NEC Certificate (Commonly referred to as UL Certificate)
- Wiring Diagram (Oneline)
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- Video1
- Video2
- Video3
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map