

## Submersible Explosion Proof Network IP Camera - 4MP, 20FPS - 100' Armored Ethernet Cable - IP66 Rated/N4X

## EXPCMR-SWP.FW-IP-POE-4MP-IR-100C

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



EXPCMR-SWP.FW-IP-POE-4MP-IR-100C Submersible Network Explosion Proof

<u>Camera</u>

Listing: NRTL Listed for United States & Canada Camera Dimensions: 8"L x 6"W x 13"H

Camera Weight: -Total Watts: 5W (Max) Power Source: PoE (802.3af)

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, H.265, H.265+

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 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: Adjustable Rear-mounted Handle/bracket

Submersible Depth: 50 Feet Maximum

Water Type: Fresh Water

Cable: 100' Armored Ethernet Cable, Pre-wired Cord and Strain Relief Cord Grip on

Camera Side of Cable

## Ratings/Features

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

Submersible in Fresh Water 50` Submersible Depth (Max)

<u>Special Orders/Requirements</u>

Contact us for special requirements

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The EXPCMR-SWP.FW-IP-POE-4MP-IR-100C Submersible Network Explosion Proof Camera from Larson Electronics is a remote inspection camera specifically designed for underwater observation in fresh water 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 a 100' armored Ethernet cable and built-in infrared, this remote inspection camera saves both time and money as well as contributing to workplace safety.

**Camera Features:** The EXPCMR-SWP.FW-IP-POE-4MP-IR-100C is fully submersible to depths up to 50 feet (maximum) in fresh water. This unit 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 underwater areas. 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 inside connections are potted to prevent water from entering the camera.

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 (EXHL-TRN-LE3-IR-1224). As an alternative, we also offer the EXHL-TRN-LE3-IR-1227 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: A 100' armored Ethernet cable/pre-wired cord and strain relief cord grip on the camera side is available for power and data. 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 NVRs 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-SWP.FW-IP-POE-4MP-IR-100C Network Explosion Proof Camera features an ATEX/IECEx certified copper-free aluminum alloy body. The camera 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)**



Links (Click on the below items to view):

- Wiring Diagram (Oneline)
- HigResPic1
- Video1
- Video2
- Video3
- Video4
- Video5
- Video6
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map