

EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV

Explosion Proof Network IP Camera - 2.0MP Resolution - 30FPS - Low Light IR Array - 108° FOV - Air Nozzle - NDAA

Product ID: 273902

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



Image: EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV Network Explosion Proof Camera

Dimensions: 2.76" x 6.1"

Camera Weight: 0.9 lb

Total Watts: 5W (Max)

Power Source: PoE (802.3af)

Image Sensor: 1/2.5" Progressive Scan CMOS sensor

Signal System: NTSC

Video Resolution: 2.0MP (1920x1080)

Frame Rate: Up to 30fps @ 1920x1080 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: 108°

Shutter Speed: 1/3s to 1/10,000s

Min. Illumination: 0.01 lux (Color) / 0 lux (w/ Built-in IR)

Day/Night: True D/N w/ Mechanical Cut Filter

Infrared Light: Built-in

Air Hose Coupler Size: 1/2"

Maximum Air Pressure: 1/2"

Digital Noise Reduction: 3D DNR

Ethernet Interface: RJ45

Ratings / Features

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 stream and two sub streams

Capable of programming unique settings per stream

ONVIF Profile S Certified

WDR (wide dynamic range) for auto adjusting

Air Nozzle w/ Female Connector

National Defense Authorization Act (NDAA) Compliant

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

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

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The EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV from Larson Electronics is a 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. This NDAA compliant unit features a pressurized air nozzle with a female stainless steel connector, located at front of the camera lens for proactive clarity.

Camera Features: The EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV Network Explosion Proof Camera features a built-in 1/2.5" progressive-scan CMOS image sensor that delivers up to 2.0MP resolution at 30 fps. The wide angle fixed lens with 108° 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 108° focal area. Total distance is dependent on mounting height and angle.

This explosion proof camera complies with the 2019 National Defense Authorization Act (NDAA). The regulation bans federal governments, their contractors and businesses with national security interests from buying and using surveillance equipment made by specific major China-based manufacturers, including Hikvision, Dahua and their OEMs. Security products sold by Honeywell, Bosch, Panasonic, ADT, Flir and many more are affected by the ban. NDAA compliance also includes a ban on ZTE, Huawei and Hytera telecommunication equipment.

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: 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 stream can be configured to different resolutions and frame rates.

Pressurized Air Nozzle: Designed for grain processing facilities and wet environments, this unit is equipped with a pressurized air nozzle at the front of the camera lens. The component features a 1/2" female stainless steel quick disconnect connector for hose attachments. With continuous airflow hitting the lens of the device, accumulation of particles is greatly decreased. This feature is suitable for hazardous locations that handle flying dust and other types of debris that can obstruct cameras, as well as for monitoring operations in wet locations.

Mounting: The EXPCMR-NDAA-IP-POE-2MP-IR-108D-APV Network Explosion Proof Camera features an ATEX/IECEx certified copper-free aluminum alloy body and weighs a total of 0.9 pounds. 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 sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.



Frequently Asked Questions (FAQ)

There are no Faqs



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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **ATEX Certificate (European Explosion Proof)**(<https://www.larsonelectronics.com/images/product/ATEXCert/273902.PDF>)
- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(<https://www.larsonelectronics.com/images/product/CECCert/273902.PDF>)
- **Certificate 1, Misc**(<https://www.larsonelectronics.com/images/product/Cert1/273902.PDF>)
- **Certificate 2, Misc**(<https://www.larsonelectronics.com/images/product/Cert2/273902.PDF>)
- **Certificate 3, Misc**(<https://www.larsonelectronics.com/images/product/Cert3/273902.PDF>)
- **Certificate 4, Misc**(<https://www.larsonelectronics.com/images/product/Cert4/273902.PDF>)
- **IEC Ex Certificate (International Explosion Proof)**(<https://www.larsonelectronics.com/images/product/IECExCert/273902.PDF>)
- **MSDS (Material Safety Data Sheet)**(<https://www.larsonelectronics.com/images/product/Msds/273902.PDF>)
- **Operations Manual**(<https://www.larsonelectronics.com/images/product/Manual/273902.PDF>)
- **RoHS Certificate (Restriction of Hazardous Substances)**(<https://www.larsonelectronics.com/images/product/RoHSCert/273902.PDF>)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(<https://www.larsonelectronics.com/images/product/NECCert/273902.PDF>)
- **Wiring Diagram**(<https://www.larsonelectronics.com/images/product/WiringDiagram/273902.PDF>)
- **HigResPic1**(<https://www.larsonelectronics.com/images/product/HigResPic1/273902.JPG>)
- **HigResPic2**(<https://www.larsonelectronics.com/images/product/HigResPic2/273902.JPG>)
- **HigResPic3**(<https://www.larsonelectronics.com/images/product/HigResPic3/273902.JPG>)
- **HigResPic4**(<https://www.larsonelectronics.com/images/product/HigResPic4/273902.JPG>)
- **HigResPic5**(<https://www.larsonelectronics.com/images/product/HigResPic5/273902.JPG>)
- **Video1**(<https://www.youtube.com/watch?v=e30ufytBwbs>)
- **Video2**(<https://www.youtube.com/watch?v=UjT-1cLKD6o>)
- **Video3**(<https://www.youtube.com/watch?v=yjtlzJRMUQU>)
- **ISO 9001 Certification**(<http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF>)
- **Business Certificate**(<https://www.larsonelectronics.com/images/pdfdocs/w9.PDF>)
- **Shipping Time Map**(<https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf>)