

## Explosion Proof 1080p HD Security Camera w/ LED Light - Optical/Digital Zoom - 250' 12/4 SOOW Cord

EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3

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



EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 Explosion Proof Camera & LED

**Light Combination Fixture** 

Listing: NRTL Listed for United States & Canada

Dimensions: 18"W x 8"D x 6"H

Weight: -

Camera Specs

Watts: 12W

Voltage: 120-240 V AC Image Sensor: CMOS Signal System: NTSC Connectors: Terminal Strips Effective Pixels: 1956(H) \* 1266(V)

Min. Illumination: 0.1 Lux @ F1.2 AGC On / 0 Lux w/ IR

Shutter Speed: 1/25(1/30s) to 1/50,000s

Lens: 5-50mm Focal Length Angle of View: 90° Day/Night: ICR

Video Framerate: 1080p @ 30fps Video Output: Analog over Copper Wire

Signal to Ratio: >62 dB Language: English

Light Specs Watts: 12W

Voltage:120-240 V AC Lumens: 1,320

Luminous Efficacy: 110 Lm/W
LED Light Color: 6000K - White
LED Life Expectancy: 50,000 hours
Lighting Configuration: 10° Spot or 40° Flood

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

Ambient Operating Temp Range: -40°C to +60°C

Housing Material: Aluminum

**Light Housing Color:** Powder Coated - Grey

Lens Material: Polycarbonate

Mounting: Adjustable Surface Mount Brackets w/ Set Screws

Cord Configuration: 200' 12/4 SOOW Cord Between Camera & Disconnect and 50' 12/4

SOOW Between Disconnect & Whip

## Ratings/Approvals:

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 Includes Analog to Stranded Wire Signal Adapter

**Special Orders - Requirements** 

Contact us for special requirements
Toll Free: 1-800-369-6671

Intl: 1-214-616-6180

Fax: 1-903-498-3364

E-mail: sales@larsonelectronics.com

The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 from Larson Electronics is a Combination Explosion Proof Camera & Explosion Proof LED Light Fixture that is designed for security and remote observation in both indoor and outdoor hazardous environments during the day and night. This 1080p HD high resolution security camera features a 150' range, 10x optical zoom with autofocus, and 62x digital zoom for maximum coverage and accuracy. A digital inverter supports both HD-TVI and CVBS analog output. This unit also features an explosion proof light that produces 1,320 lumens of high intensity LED light output and is available with both spot or flood options to ideally illuminate the area being covered by the camera.

**Camera Features:** The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 security camera provides operators in hazardous areas with crisp 1080p HD high resolution images. A 5-50mm motorized lens automatically adjusts focus, providing operators with a precise 10x optical zoom and autofocus and 62x digital zoom image. A digital inverter supports both HD-TVI and CVBS analog output to a customer provided remote mount DVR system. This camera measures a compact  $12.34" \times 3.96" \times 4.22"$  and the mounting base allows for precise aiming with 90° of vertical adjustment.

In-Use Robotic Sandblasting

The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 security camera is built to perform under harsh and rugged conditions. This IP67 rated waterproof unit resists the corrosive effects of weather, dust, dirt, and humidity. This Class I Divisions 1 & 2, Class II Divisions 1 & 2 rated camera provides property and product security while also protecting operators with its safe and reliable explosion proof and weatherproof design.

**Light Features:** The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 produces 1,320 lumens of high-intensity LED light for illumination within hazardous areas and potentially explosive work environments. This explosion proof LED light fixture operates on 120-240 V AC. The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 is available in two lighting configurations; spot and 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. An adjustable surface mount mechanism allows operators to control the direction of the beam by tilting the unit towards the desired target.

**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.

**Heat Management:** Heat is the single largest factor in premature LED failure and color shifting. These LED units contain advanced drivers which use pulse width modulation to control heat buildup rather than simple voltage regulators which are typically harsh on sensitive electronics and can contribute to early LED failure. These units automatically sense the temperature of each LED and adjust the

energy frequency or "duty cycle" accordingly to maintain heat levels within acceptable ranges. This system in essence flashes current at an extremely fast on and off rate to each LED based upon the LED's core temperature. This flash rate is too fast to detect with the human eye, but provides precise control of the current flowing to each LED and thus the heat it generates. This allows the LEDs to be driven at up to 100% capacity without overheating or visible loss of light output. The LEDs are always driven at the same voltage but the duty cycle, however, is changed to alter how long the LEDs are actually on or off. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 50,000 hours.

Durability: The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 explosion proof camera & LED light combination fixture from Larson Electronics is rated NEMA Type 3, 4, 4X, 7 (B,C,D) and 9 (E,F,G) and designed to withstand the rigors of demanding environmental and operating conditions while remaining lightweight and easy to use. These units can operate in temperatures of -40° Celsius to 60° Celsius, are waterproof to 3 meter and resist ingress of dust, dirt and humidity. The housings are formed from extruded aluminum and the lenses are unbreakable polycarbonate. The LEDs offer inherent LED resistance to shocks and vibrations. Wiring: This unit is designed to operate on 120-240 V AC. The camera features 250' of total wiring. There is 200' of 12/4 SOOW cord between the camera and disconnect and 50' of 12/4 SOOW cord between the disconnect and whip. The cable connectors on this unit are **NOT** installed at the factory and must be wired by the operator. The cable is installed to the camera/light assembly with the wire being potted on the inside of the enclosure. It is potted using an epoxy coating which prevents water and moisture from getting into the camera/light assembly. The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 also comes with an analog to stranded wire signal adapter that allows the camera to be connected to a network video recorder (NVR).

**Mounting:** The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3 explosion proof security camera & LED light combination fixture is secured to flat surfaces, such as a ceiling or wall, using and adjustable reverse pedestal style brackets. The included mounting bracket allows 90° vertical adjustment and 360° of swivel for precision aiming. The camera and the light each have their own bracket for mounting reliability and are connected via piping for increased strength and mounting durability.

**Applications:** Vessel, tank and reactor monitoring, remote observation of external facilities, offshore and land based rigs, indoor and outdoor security, commercial buildings

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-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3-Beam Config Example: EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M3-SP

Beam Config	
SPOT	-SP
FLOOD	-FL



Links (Click on the below items to view):

- Dimensional Drawing 2D
- STEP File (3D CAD Model)
- HigResPic1
- ISO 9001 Certification
- Business Certificate