

**Explosion Proof 1080p HD Security Camera w/ LED Light - Optical/Digital Zoom - 285' 12/4  
SOOW Cord - Potted Cable Connections, Seal-Offs w/ Chico, Strain Relief  
EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5**

**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-M5 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:** 10' 12/4 SOOW Cord Between Camera & Explosion Proof Disconnect, 250' 12/4 SOOW Between Exp. Disconnect & Second Exp. Disconnect, and 25' 12/4 SOOW Whip Extending from Second Exp. Disconnect w/ Blunt Cut End (See

**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  
Potted Cable Connections  
Kellems Grip Strain Relief on Receptacles  
Includes Analog to Stranded Wire Signal Adapter

**Special Orders - Requirements**

Contact us for special requirements

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Description Above for More Details on Wiring)

## DESIGN CONFIGURATION

- Camera + Light Assembly w/ trunnion mount, w/ LED Light on right side
- Potted cable connections inside camera/light assembly
- 90 degree elbow
- Kellums Cord Grip (Chinese fingers design) Strain Relief
- 10' 12/4 SOOW Cord
- Explosion proof male plug (male part of disconnect) w/ built in strain relief
- Explosion proof receptacle (female part of disconnect)
- Potted cable connections inside receptacle assembly
- Seal off w/ Chico compound poured at factory
- Kellums Cord Grip (Chinese fingers design) Strain Relief
- 250' 12/4 SOOW Cord - Explosion proof male plug (male part of disconnect) w/ built in strain relief - Explosion proof receptacle (female part of disconnect)
- Potted cable connections inside receptacle assembly
- Seal off w/ Chico compound poured at factory
- Kellums Cord Grip (Chinese fingers design) Strain Relief
- 25' 12/4 SOOW Cord - Blunt cut cable end for customer connections

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**The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5 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-M5 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" x 3.96" x 4.22" and the mounting base allows for precise aiming with 90° of vertical adjustment.

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### In-Use Robotic Sandblasting

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The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5 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, Class III 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-M5 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-M5 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-M5 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 285' of total wiring. There is 10' of 12/4 SOOW cord between the camera/light and first explosion proof disconnect. The disconnect features built-in strain relief and connects to an explosion proof receptacle. The receptacle has potted cable connections on the inside. On the other side of the receptacle is a seal-off with Chico compound followed by a Kellums cord grip (Chinese fingers design) strain relief. Extending from that seal-off and Kellums cord grip is 250' of 12/4 SOOW cord that runs to the second explosion proof disconnect. The disconnect features built-in strain relief and connects to a second explosion proof receptacle. This receptacle also features potted cable connections on the inside as well as another seal-off with Chico compound and another Kellums cord grip (Chinese fingers design) strain relief. Finally, a 25' length of 12/4 SOOW cord extends from the second seal-off and Kellums cord grip and is terminated in a blunt cut end. The cable connectors on this unit are installed at the factory. The pottings are completed using an epoxy coating which prevents water and moisture from getting inside.

The EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5 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-M5 explosion

proof security camera & LED light combination fixture is secured to flat surfaces, such as a ceiling or wall, using an 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 [sales@larsonelectronics.com](mailto:sales@larsonelectronics.com) for more information about our custom options tailored to meet your specific industry needs.

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## Frequently Asked Questions (FAQ)

**Options:**

**EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5-Beam Config**

**Example: EXPCMR-ALG-OZ-IC-1080P-LE1-1227-QD-12.4-M5-SP**

Beam Config	
SPOT	-SP
FLOOD	-FL

Links (Click on the below items to view):

- [Dimensional Drawing 2D](#)
- [Wiring Diagram \(Online\)](#)
- [HigResPic1](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)