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EPL-PM-100LED-D-V2-150C-EPP

100W Explosion Proof LED Light - C1D1, 120-277V - Inline Dimmer, Non-Sparking Aluminum Base - 150' Cord

Product ID: 279827

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



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.

EPL-PM-100LED-D-V2-150C-EPP Explosion Proof LED Light

Listing: NRTL Listed for United States and Canada
Lamp Type: Cree LED - Dimmable
Dimensions: 18.09"L x 15.9"W x 23.75"H
Total Weight: 68 Lbs
Fixture Weight: 45 Lbs
Voltage: 120-277V
Total Watts: 100W
Total Lumens: 11,667 lms
Luminous Efficacy: 116.67 Lm/W
LED Lamp Life Expectancy: 60,000 Hours
Color Temp: 5000K, 4000K, 3000K
Color Rendering Index: >75 CRI
Beam Angle: 60° or 125°
Lighting Configuration: Flood Pattern
Power Efficiency: >95%
Power Factor: 0.992
Dimmer Location: Inline, Mounted on the Frame
Amperage: 0.83A @ 120V, 0.42A @ 240V, 0.36A @ 277V
Ambient Operating Temp Range: -50°C to +65°C
Operating Temp Rating: T5
Lamp Housing Material: Copper Free Cast Aluminum
Stand Material: Non-Sparking Aluminum
Lens Material: Hardened Borosilicate Glass
Gasket Material: Silicone

Ratings/Approvals

Class I, Divisions 1 & 2, Groups C and D
Class II, Divisions 1 & 2, Groups E,F,G
NRTL Certified to UL 1598
NRTL Certified to C22.2 No. 137 Rev 2009
NRTL Certified to C22.2 No. 250.0
T5 Temperature Rating
Paint Spray Booth Approved
IEC 60529 Tested
LEL Approved
Multiple Driver Banks
80% Lumen Retention after 60,000 Hours
Factory Sealed Light Fixture
150 Foot SOOW Cable
Direct Replacement for 400W Portable Lights

Special Orders - Special Requirements

Contact us for special requirements

Mounting: Triangular Shaped Aluminum Base Stand

Finish: Powder Coated - Gloss Blue

Wiring: 150` 16/3 SOOW Cord Explosion Proof Cord Cap

Cord Cap: 5-15 Straight (120V), 5-20 Twist (120V), or 6-20 Twist (250V) Explosion Proof Plug

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Made in Texas

The EPL-PM-100LED-D-V2-150C-EPP Explosion Proof LED Light from Larson Electronics is rated Class I, Divisions 1 & 2 Groups C & D and Class II, Divisions 1 & 2. A 16-inch Cree LED dimmable light head produces 11,667 lumens of light during use. Mounted to a non-sparking aluminum frame, this LED light comes with 150 feet of SOOW cord for versatile power connections.

The EPL-PM-100LED-D-V2-150C-EPP explosion proof dimmable LED light provides 9,000 square feet of work area coverage with 11,667 lumens of light output. This portable LED light is mounted to an A-frame style aluminum base and has an adjustable LED light head measuring 16 inches wide by 14 inches high. The LED light head on this unit produces a brilliant flood pattern that is ideal for illuminating enclosed areas and hazardous locations where flammable vapors, gases and dust may be present. An inline dimmer is available on the frame for adjusting light output.

This explosion proof LED light fixture is comprised of a 16-inch wide square LED light head mounted within a portable base stand fabricated from non sparking aluminum with a convenient carrying handle built into the top of the stand. The aluminum A-frame is powder coated with glossy blue finish for corrosion resistance and aesthetics. The lamp can be easily adjusted up or down 90 degrees and locked into position by simply loosening the two hand screws located on either side of the light head and re-tightening them once the desired angle is found.



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Click Photo to Enlarge



Click Photo to Enlarge

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.

LED Drivers: Even in LED fixtures, heat is the single largest factor in premature light failure and color shifting. As a result, many manufacturers reduce the output of their LEDs in order to reduce the amount of heat produced. Rather than lower light output or quality, Larson Electronics addresses this problem with the addition of electronic LED drivers. These internal drivers provide the ability to automatically monitor and adjust

input current to maintain the correct LED voltage levels regardless of input levels across a specific range. This not only reduces the energy dissipation, effectively lowering the operating temperature of the fixture, but also prevents AC over-voltage and short circuit loading making this fixture virtually maintenance free. Because the electronic drivers allow the EPL-PM-100LED-D-V2-150C-EPP to run at a cooler internal temperature and regulates the electrical current, energy efficiency and LED service hours are maximized while at the same time reducing operating costs and downtime incurred from the frequent servicing intervals required with other hotter running lights. The explosion proof LED light fixture features multiple LED drivers which helps to increase the operational life of the fixture. With traditional LED lights, in the event an LED array or driver fails, the entire fixture no longer illuminates. With the EPL-PM-100LED-D-V2-150C-EPP series of explosion proof lamps from Larson Electronics, each LED fixture contains six individual LED boards configured in a series of banks. Each bank contains two LED on a single board with an individual driver. In the event of a driver failure, only one bank of LEDs will be effected while the other banks will continue to operate. In the event that of an LED failure, the mating LED will continue to operate.

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60° Beam Angle



125° Beam Angle Plug



140° Beam Angle Plug

Beam Angles: When used as a portable lighting solution, the varying beam angles are each individually ideal for several environments. The 60° beam provides the most intense beam of the three options. It is perfect for narrow, confined spaces and is ideally suited for tank cleaning purposes. It offers focused light to provide ample illumination to tight work spaces and other environments. The 125° beam offers a more diffused source of light that is also less intense in brightness. It is a great general area work light and performs well when used for outdoor illumination. The 140° beam offers a very wide lighting pattern and is ideal for situations where lighting distance is not a concern, but illumination of a wider area and even light distribution is. The 140° beam is great for situations that call for working in close proximity to lights such as in a paint booth.

This explosion proof LED unit produces 11,667 lumens with a color temperature of 5000K standard and a color rendering index of 75, which produces colors and details more accurately than high pressure sodium or mercury vapor luminaries. We also offer 3000K warm white and 4000K natural white color temperature options (longer lead times may apply for non-standard temperatures). This lamp uses Cree LED units that have been chosen for their high lumen-per-watt ratio and extreme longevity. These Cree LEDs generate a robust 116.67 lumens per watt and have 80% lumen retention at 60,000 hours, giving them better efficiency and operational life than traditional light sources.

Field Serviceability: This explosion proof LED light fixture is field serviceable. All major internal components can be purchased from Larson Electronics and installed by a licensed electrician with basic tools. With most explosion proof fixtures, the fixture must be returned to the manufacturer for repair work, which presents downtime and long turn around times for repair work. Larson Electronics addresses this issue with the EPL-PM-150LED-RT series with field serviceability, allowing operators to perform service work without having to return the fixture to the manufacturer in the event of damage or failure.

Energy Consumption Comparison

	Metal Halide	LED

Wattage	400 watts	100 watts
Amp Draw @ 120V AC	3.33 amps	0.83 amps
Amp Draw @ 220V AC	1.82 amps	0.54 amps
Amp Draw @ 240V AC	1.67 amps	0.42 amps
Amp Draw @ 277V AC	1.44 amps	0.36 amps
Amp Draw @ 12V DC	33.33 amps	8.33 amps
Amp Draw @ 24V DC	16.67 amps	4.16 amps
Lamp Life Expectancy	20,000 hours	50,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	$241.78	$52.56

Each LED light fixture has the potential to save $150.00+ per year in electricity alone, not including maintenance costs, operational downtime, reduced productivity, HVAC loads, or carbon footprint. When retrofitting an entire facility with 100s of light fixtures, the return on investment of LED over metal halide becomes evident.

Voltage: This light is universal voltage capable and can be operated with 120-277V AC, without modifications to the fixture.

Click Photos to Enlarge



5-15 Straight Blade Plug



5-20 Straight Blade Plug



6-20 Straight Blade Plug

Wiring & Plug: This explosion proof light is equipped with a 150-foot 16/3 chemical and abrasion resistant SOOW cord that is fitted with an explosion proof cord cap for easy connection to explosion proof outlets. Plug options include a 5-15 15 amp straight blade plug for use with 120V explosion proof outlets, a 5-20 20 amp straight blade plug for use with 120V explosion proof outlets, or a 6-20 20 amp straight blade plug for use with 220-240V explosion proof outlets.

Suggested Applications: This pedestal base stand explosion proof light is ideal for any hazardous location environment requiring durable and quality lighting in a portable form factor.

Applications include but not limited to aircraft maintenance, alcohol processing, aerospace, chemical manufacturing, coke processing, cold storage, compressed natural gas (CNG) facilities, cranes, cryogenics, distilleries, food processing (with food grade gasketed polycarbonate lens: EPL-HB-150LED-RT-188), fuel storage, gas processing plants, grain processing, laboratories, liquefied natural gas (LNG) facilities, liquid propane gas (LPG), manufacturing, marine vessels, methane production, mining, offshore, oil drilling rigs, oil refineries, paint spray booths, paper processing, petrochemical, pharmaceuticals, power plants, production refineries, sand blast cabinets, sewage and septic tanks, shipyards, solvent and cleaning areas, storage facilities, tank farms, tankers, textile, washdown areas, waste treatment plants, and woodworking. Click here to read the NEC description for explosion proof and hazardous locations.

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.

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Frequently Asked Questions (FAQ)

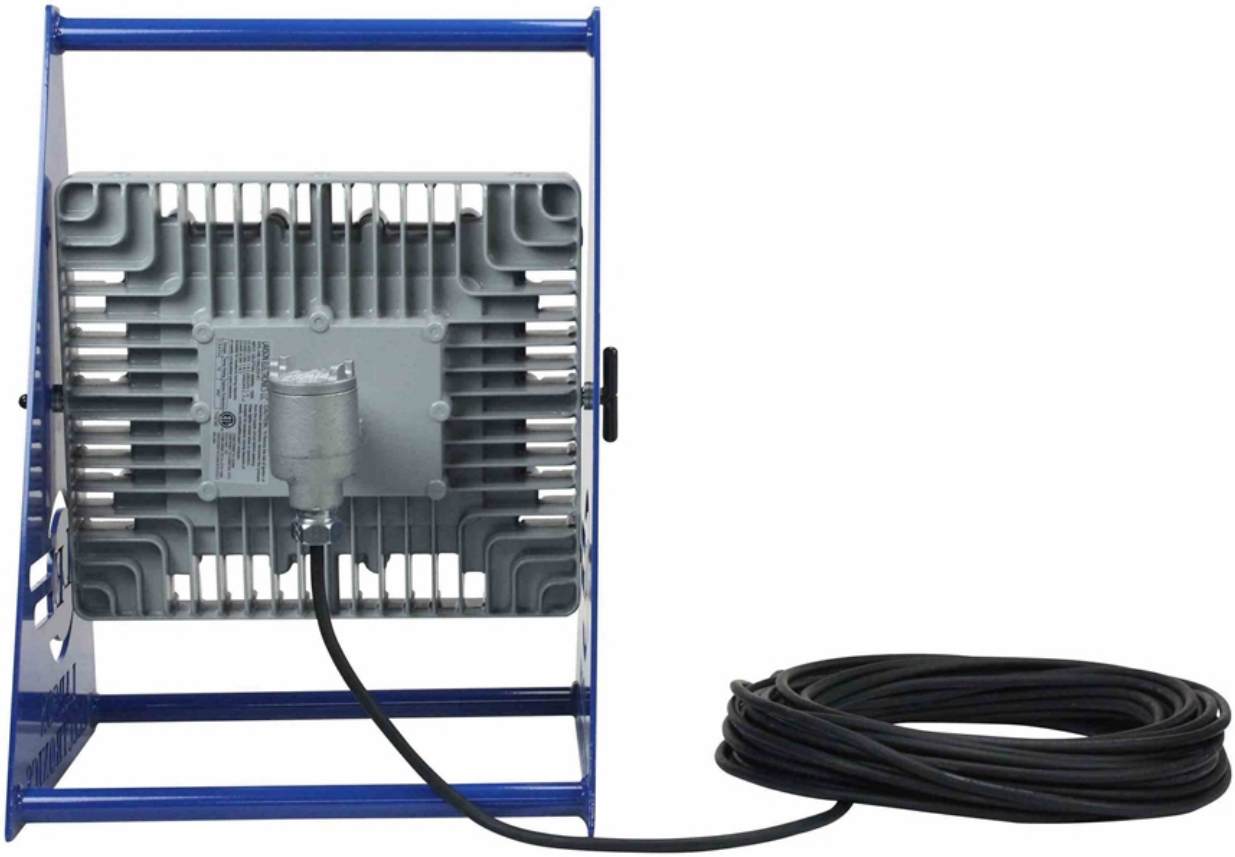






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Product ID: 279827

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

EPL-PM-100LED-D-V2-150C-EPP-Cord Cap-Beam Config

Example: EPL-PM-100LED-D-V2-150C-EPP-1523-60DB

Cord Cap	
5-15P	-1523
5-20P	-2023.125V
6-20P	-2023.250V

Beam Config	
60°	-60DB
125°	-125DB

Links (Click on the below items to view):

- **Operations Manual**
- **HigResPic1**
- **HigResPic2**
- **HigResPic3**
- **HigResPic4**
- **HigResPic5**
- **HigResPic6**
- **HigResPic7**
- **HigResPic8**
- **Video1**
- **Video2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**