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EPL-PM-150LED-100-EPP

150 Watt Class 1 Div 1 Explosion Proof LED Light - Non-Spark Aluminum Base

Product ID: 70925

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



Image: EPL-PM-150LED-100-EPP

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.

Specifications / Additional Information

EPL-PM-150LED-100-EPP Explosion Proof LED Light

Lamp Type: Cree LED
Dimensions: 18.09"L x 15.9"W x 23.75"H
Total Weight: 68 lbs
Fixture Weight: 45 lbs
Voltage: 100-277V AC 50/60Hz or 11-25V AC/DC
Total Watts: 150 watts
Total Lumens: 21,000
Luminous Efficacy: 140 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
Amperage: 2.5A @ 120V, 1.26 @ 240V, 1.08 @ 277V
Ambient Operating Temp Range: -50°C to +65°C
Operating Temp Rating: T5
Lamp Housing Material: Copper Free Cast Aluminum

Ratings/Approvals

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

Stand Material: Non-Sparking Aluminum
Lens Material: Hardened Borosilicate Glass
Gasket Material: Silicone
Mounting: Triangular Shaped Aluminum Base Stand
Finish: Powder Coated - Gloss Blue
Wiring: 100` 16/3 SOOW Cord w/ Explosion Proof Cord Cap
Cord Cap: 5-15 Straight (120V), 5-20 Twist (120V), or 6-20 Twist (250V) Explosion Proof Plug

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664

E-mail: sales@larsonelectronics.com

Made in Texas

The EPL-PM-150LED-100 Explosion Proof LED Light from Larson Electronics is rated Class I Divisions 1-2 Groups C & D and Class II Divisions 1-2 and uses a 16 inch Cree LED light head to produce 21,000 lumens of light while drawing only 150 watts.

The EPL-PM-150LED-100 explosion proof LED light provides 9,000 square feet of work area coverage with 21,000 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 of light that is ideal for illuminating enclosed areas and hazardous locations where flammable vapors, gases and dusts may be present.

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 resistances 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 retightening them once the desired angle is found.



Click Photo to Enlarge



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.

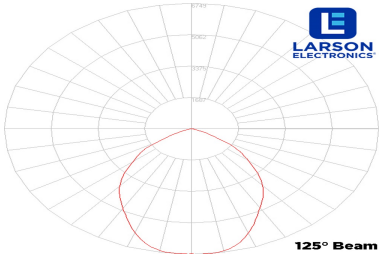
LED Drivers: Even in LED fixtures, heat is the single largest factor in premature light failure and color shifting. As a result, many manufacturers reduce the output of their LEDs in order to reduce the amount of heat produced. Rather than lower light output or quality, Larson Electronics addresses this 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-150LED-100 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-150LED-100 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.

Click Photos to Enlarge



60° Beam Angle



125° Beam Angle

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.

This explosion proof LED high bay produces a total of 21,000 lumens with a color temperature of 5000K standard and a color rendering index of 75 which produces colors and details much more accurately than high pressure sodium or mercury vapor luminaries. We also offer a 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 140 lumens per watt effective lumen output and have a 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-100 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	150 watts
Amp Draw @ 120V AC	3.83 amps	1.25 amps
Amp Draw @ 220V AC	2.09 amps	0.68 amps
Amp Draw @ 240V AC	1.92 amps	0.63 amps
Amp Draw @ 277V AC	1.66 amps	0.54 amps
Amp Draw @ 12V DC	38.33 amps	12.5 amps
Amp Draw @ 24V DC	19.12 amps	6.25 amps
Lamp Life Expectancy	20,000 hours	50,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	$241.78	$78.84

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 100-277V AC, 50/60 Hz without modifications to the fixture, and a low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 volts for rigs and vision systems. 18-48V AC/DC voltages are available for network systems and marine vessels. We also offer an additional 347-480V high voltage and 0-10V dimmable versions of this explosion proof LED light 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 tower mounted flood lighting system is equipped with 100 feet of 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 application Class I & II, Divisions 1 & 2 explosion proof or 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.

Made in USA Quality

1. Approved Class I Divs 1-2 Class II Divs 1-2
2. Led lamp head requires no lamping.
3. Durable Base Mount constructed of copper free aluminum.
4. No ballast box. No ballast to replace.
5. Extreme long life LEDs reduce maintenance and replacement costs.
6. Adjustable LED light head.
7. 5000K Color Temperature and Color Rendering Index of 75
8. 21,000 Lumens produced from only 150 watts.
9. Mercury free shock proof LED lamp light head.

Superior LED Benefits

1. 60,000+ hour lifespan.
2. Can SAVE 50% or more on energy.
3. 100% recyclable.
4. No toxins-lead, mercury.
5. No UV light, infrared radiation or CO2 emissions.
6. Bright, even light maintains consistent color over time.
7. Instant on/off - No flickering, delays or buzzing.
8. Very good color rendering.
9. Vibration/impact resistant.
10. Significantly cooler operation.
11. Less frequent outages, higher output improves workplace safety.

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Frequently Asked Questions (FAQ)

There are no Faqs

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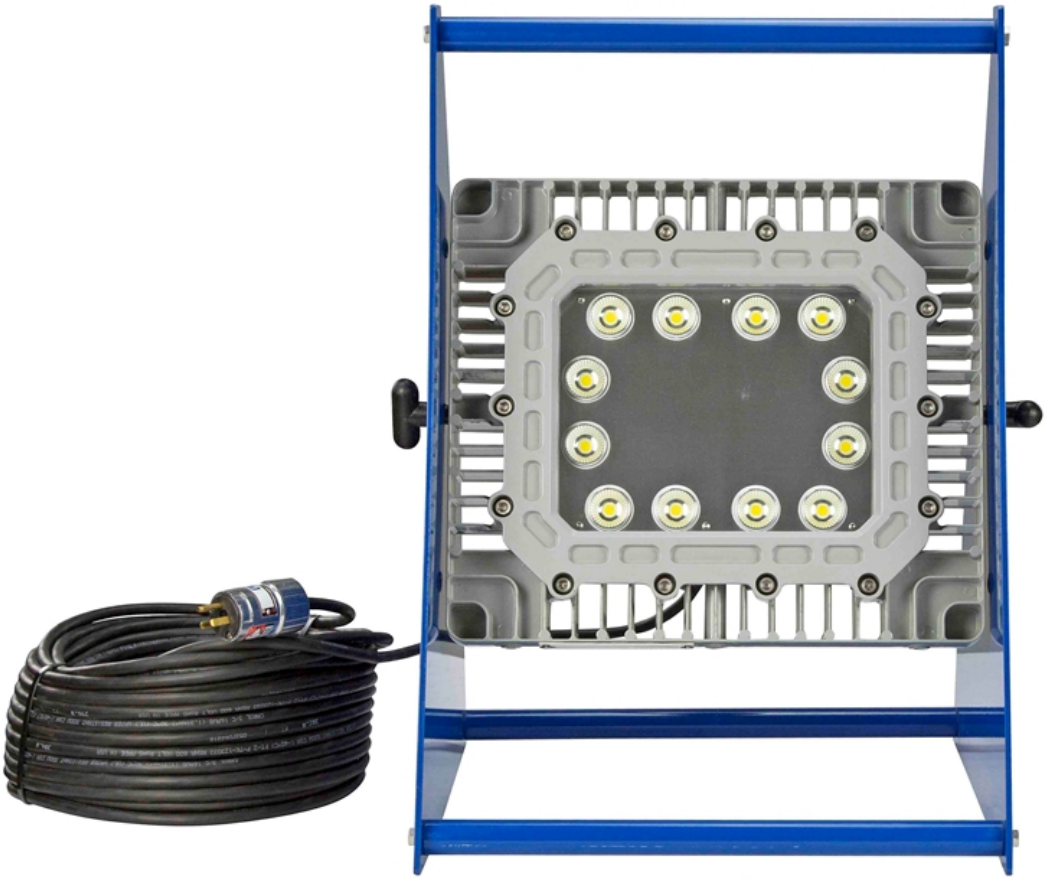

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EPL-PM-150LED-100-EPP

Product ID: 70925

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:

EPL-PM-150LED-100-EPP-Beam Config-Voltage-Cord Cap
Example: EPL-PM-150LED-100-EPP-60DB-1227-1523

Beam Config	
60°	-60DB
125°	-125DB
140°	-140DB

Voltage	
120-277V AC	-1227
11-25V AC/DC	-1224

Cord Cap	
5-15	-1523
5-20	-2023-125V
6-20	-2023-250V

Links (Click on the below items to view):

- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(https://www.larsonelectronics.com/images/product/CECCert/70925.PDF)
- **CE Certificate**(https://www.larsonelectronics.com/images/product/CECert/70925.PDF)
- **Certificate 1, Misc**(https://www.larsonelectronics.com/images/product/Cert1/70925.PDF)
- **Certificate 2, Misc**(https://www.larsonelectronics.com/images/product/Cert2/70925.PDF)
- **Certificate 3, Misc**(https://www.larsonelectronics.com/images/product/Cert3/70925.PDF)
- **Dimensional Drawing 2D**(https://www.larsonelectronics.com/images/product/DimensionalDrawing/70925.PDF)
- **IES (Photometric File)**(https://www.larsonelectronics.com/images/product/ies/70925.ZIP)
- **MSDS (Material Safety Data Sheet**(https://www.larsonelectronics.com/images/product/Msds/70925.PDF)
- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/70925.PDF)
- **RoHS Certificate (Restriction of Hazardous Substances)**(https://www.larsonelectronics.com/images/product/RoHSCert/70925.PDF)
- **STEP File (3D CAD Model)**(https://www.larsonelectronics.com/images/product/Step/70925.ZIP)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(https://www.larsonelectronics.com/images/product/NECCert/70925.PDF)
- **Wiring Diagram**(https://www.larsonelectronics.com/images/product/WiringDiagram/70925.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/70925.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/70925.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/70925.JPG)
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- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/70925.JPG)
- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/70925.JPG)
- **HigResPic7**(https://www.larsonelectronics.com/images/product/HigResPic7/70925.JPG)
- **HigResPic8**(https://www.larsonelectronics.com/images/product/HigResPic8/70925.JPG)
- **Video1**(https://www.youtube.com/watch?v=j0PmvdBLJ9Y)
- **Video2**(https://www.youtube.com/watch?v=_BDujaYnhNk)
- **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)