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EPL-LED-120W-RT

120W Explosion Proof LED Flood Light - Surface Mount - 16,800 Lumens - C1D1 - 120-277V AC

Product ID: 243728

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-LED-120W-RT Explosion Proof LED Flood Light
Listing: United States - Canada
Lamp Type: Cree LED
Dimensions: 14"H x 16"W x 5"D
Weight: 32 lbs
Voltage: 100-277 Volts AC, 50/60Hz or 11-25 Volts AC/DC
Total Watts: 120W
Total Lumens: 16,800
Luminous Efficacy: 140 Lm/W
Lamp Life: 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
Ambient Operating Temp Range: -50°C to +65°C
Operating Temp Rating: T5
Housing Material: Copper Free Cast Aluminum
Housing Finish: Epoxy Powder Coated - Grey
Lens Material: Hardened Borosilicate Glass
Gasket Material: Silicone
Mounting: Adjustable Flat Surface Mount U-Bracket
Wiring: 10` 16/3 SOOW w/ Flying Leads
Wiring Hub: 3/4" NPT

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
Class III, Divisions 1 & 2
Certified to UL 844 Ed. 13
Certified to UL 1598
Certified to C22.2 No. 137 Rev 2009
Certified to C22.2 No. 250.0
Certified to C22.2 No. 30-M-1986 Rev 2012
T5 Temperature Rating
Paint Spray Booth Approved
IEC 60529 Tested
IP67 Rated Waterproof
LEL Approved
Multiple Driver Banks
80% Lumen Retention after 60,000 Hours
Factory Sealed Light Fixture
3.5kV Surge Protection (NTC Circuit)

Special Orders- Requirements
Contact us for special requirements
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The EPL-LED-120W-RT from Larson Electronics is an Explosion Proof High Bay LED Light Fixture that provides operators with a powerful and energy efficient alternative to traditional hazardous location luminaries. Cree LED technology and compact design makes this lamp an excellent replacement upgrade option for bulky and high maintenance cost older incandescent, metal halide and high pressure sodium lights.
This Class I Divisions 1 & 2 and Class II Divisions 1 & 2 explosion proof light fixture provides 16,800 lumens of high quality light while drawing only 120 watts. The copper free aluminum alloy body is powder coated for added durability and an attractive aesthetic appearance. A special heat dissipating design in conjunction with LED technology helps this fixture to achieve an excellent 60,000 hour rated lifespan with 80% lumen retention. The lightweight design and low profile make this unit an attractive alternative to larger and heavier older fixtures and requires less hardware to install.



Click Photo to Enlarge



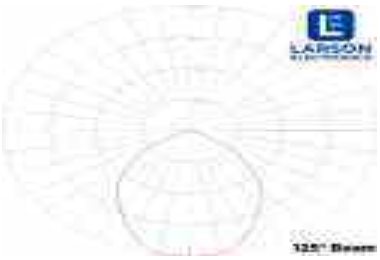
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LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, 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.
This 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. This new series of LED lamps contains twelve individual LED boards configured in a series of banks. Each bank contains two LED boards 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.
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-LED-120W-RT 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-LED-120W-RT 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



140° 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. 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 unit produces 16,800 lumens with a color temperature of 5600K 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 both 3000K warm white and 4500K 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-HB-120LED-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	120 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 $120.00+ 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 explosion proof LED light is universal voltage capable and can be operated with 100-277V AC, 50/60 Hz without modifications to the fixture. A low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 volts is

also available. 18-48V AC/DC voltage models are available for network systems and marine vessels. We also offer an additional 347-480V high voltage, 125-250V DC, and 0-10V dimmable versions of this explosion proof LED light fixture.
Mounting: The EPL-LED-120W-RT comes standard with an adjustable surface mount bracket. The EPL-LED-120W-RT offers an adjustable mounting system that this fixture to be mounted to any flat surface including walls and ceilings.
This explosion proof LED light fixture is paint spray booth listed, IP67 rated, dust-proof, and protected against high pressure jets and temporary submersion. The cast aluminum body and LED lamp give this light excellent durability and resistance to vibration and impacts. The housing is specially designed to dissipate heat which increases the efficiency and lifespan of the LEDs and electronics.
Suggested Applications: The EPL-HB-120LED-RT is approved for use within environments where flammable or combustible gases, vapors, dusts, fibers, and flying exist or stand the potential to exist, and is ideal for a wide variety of applications. 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-120LED-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.

High Quality Features

1. Low power consumption.
2. Instant on/off operation.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy.
4. Superior color rendering compared to HPS, LPS, MH.
5. Retains 80% lumen output after 60,000 operating hours.
6. Powder coated aluminum fixture body.
7. Adjustable surface mount bracket included
8. Low profile - Light weight
9. 16,800 Lumen output from 120 watts

Superior LED Benefits

1. 60,000 hour lifespan.
2. Can SAVE 50% or more on energy.
3. Qualifies retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
5. 100% recyclable.
6. No toxins-lead, mercury.
7. No UV light, infrared radiation or CO2 emissions.
8. Qualifies buildings for LED and other sustainable business certifications.
9. Bright, even light maintains consistent color over time.
10. Instant on/off - No flickering, delays or buzzing.
11. Very good color rendering.
12. Vibration/impact resistant.
13. Significantly cooler operation.
14. Less frequent outages, higher output improves workplace safety.

Frequently Asked Questions (FAQ)