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EPL-LR-48-100W-LED-TRN

100W Explosion Proof LED Linear Fixture - Class I, II, III - 14,000 Lumens - Pendant & Adjustable Trunnion Mounts

Product ID: 284197

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-LR-48-100W-LED-TRN - Class I, II and III Rated Explosion Proof LED Light

Lamp Technology: LED

Dimensions: 46.61"-L x 13.385"-W x 10.433"-H
Weight: 40.78 lb
Voltage: 100-277 Volts AC, 50/60Hz or 11-25 Volts AC/DC
Total Watts: 100W
Total Lumens: 14,000 lms
Luminous Efficacy: 140 Lm/W
Lamp Life: 50,000+ Hours
Color Temp: 5000K
Color Rendering Index: 80
Lamp Type: -
Lamp Base: -
Replacement Lamp: -
Beam Angle: 120°
Lighting Configuration: Flood Pattern
Power Efficiency: -

Power Factor: -

Ambient Operating Temp Range: -
Operating Temp Rating: T5
Housing Material: Non-Sparking
Housing Finish: -
Lens Material: -

Gasket Material: -

Ratings/Approvals

Certified to United States, Canada, Europe & International Standards
Class I, Division 1, Groups C, D
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III, Divisions 1 & 2
ATEX II2 G Ex db op is IIB T4/T5 Gb
ATEX II2 D Ex op is tb IIIC T135°C Db IP66
IEC Ex Ex db op is IIB T4/T5 Gb
IEC Ex Ex op is tb IIIC T135°C Db IP66
NRTL Listed to UL 844
NRTL Listed to UL 1598, UL 1598A
NRTL Listed to CSA C22.2 No 137
NRTL Listed to ATEX 60079
NRTL Listed to IEC Ex 60079
ABS Certified

NEMA 3, 3R, 4

IP66 Waterproof

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Mounting: 3/4" Pendant & Adjustable U-bracket Trunnion Mount - Both Ship w/ Fixture

Wiring: -

Wiring Hub: -

Intl: 1-903-270-1187

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The EPL-LR-48-100W-LED-TRN from Larson Electronics is an Explosion Proof Linear LED Light Fixture that provides operators with a powerful and energy efficient alternative to traditional hazardous location luminaries. This 100-watt lamp provides 14,000 lumens of white light during use. Cree LED technology and compact design makes this unit 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 14,000 lumens of high quality light while drawing only 100 watts. A special heat dissipating design in conjunction with LED technology helps this fixture to achieve an excellent 50,000-hour rated lifespan with 80% lumen retention. With a 140 Lm/w efficiency rate, the LED lamp produces colors and details much more accurately than high pressure sodium or mercury vapor luminaries. The EPL-LR-48-100W-LED-TRN features a 120° beam angle.
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-LR-48-100W-LED-TRN 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.

Energy Consumption Comparison

	Metal Halide	LED
Wattage	400 watts	100 watts
Amp Draw @ 120V AC	3.83 amps	0.83 amp
Amp Draw @ 220V AC	2.09 amps	0.45 amps
Amp Draw @ 240V AC	1.92 amps	0.41 amps
Amp Draw @ 277V AC	1.66 amps	0.36 amps
Amp Draw @ 12V DC	38.33 amps	8.33 amps
Amp Draw @ 24V DC	19.12 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 explosion proof LED light is universal voltage capable and can be operated with 100-277 V 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. 18-48 V AC/DC voltage models are available for network systems and marine vessels. We also offer an additional 347-480 V high voltage, 125-250 V DC, and 0-10 V dimmable versions of this explosion proof LED light fixture.

Mounting: The EPL-LR-48-100W-LED-TRN comes standard with both pendant mount and adjustable U-bracket trunnion mount bracket. Surface applications are mounted using the included adjustable bracket found on the rear of the unit. Pendant applications are mounted from the ceiling and are suspended by rigid pipe via the 3/4" NPT hub on the back of the explosion proof fixture. Wiring is fed through rigid pipe to the junction box and tied in to the fixture's lead wires, completing the electrical connection. Additional mounting types are available for this model.

Suggested Applications: The EPL-LR-48-100W-LED-TRN 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-LR-48-100W-LED-TRN-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)

EPL-LR-48-100W-LED-TRN
Product ID: 284197

Warranty: 60 Months

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

Options:
EPL-LR-48-100W-LED-TRN-Voltage
Example: EPL-LR-48-100W-LED-TRN-1227

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

Links (Click on the below items to view):

- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**