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EPL-EMG-48-2L-LED-C

48W Explosion Proof LED Light w/ Emergency Backup - C1D1 - (2) 4ft LED Lamps - Blackout Light

Product ID: 221758



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-EMG-48-2L-LED-C Explosion Proof
NRTL Listed for United States & Canada
Dimensions: W-11.25" x L-52" x H-8.5"
Weight: 45 lbs
Voltage: Universal 120-277V AC 50/60 Hz or 10-30V DC
Total Watts: 48W (24W per Lamp)
Total Lumens: 3,000
LED Lamp Life Expectancy: 50,000+ Hours
Luminous Efficiency: 125 Lumens per Watt
Color: 600-675Nm (Red) or 420-440Nm (Blue)

Color Rendering Index: >80

Beam Angle: 150°

Power Efficiency: 90%

Power Factor: >0.95
Amp Draw: 0.4A @ 120V AC, 0.173A @ 277V AC
Ambient Operating Temp Range:-35° C to +55°C
Operating Temp Rating: T6 Rated
Minimum Operating Temp: -35°C

Maximum Case Temp: +90°C

Housing Material: Cast Aluminum End Caps, Aluminum Reflectors - Copper Free

Lens Material: Hardened Borosilicate Glass Tubes

Gasket Material: Buna Rubber O-Rings

Mounting: Surface Standard - Pendant Optional

Wiring Hub: 1/2" NPT

Ratings
Class I, Division 1, Groups C and D
Class I, Division 2, Group A,B,C,D
Class II, Division 1&2 Groups E,F,G
NRTL Certified to UL 595 Marine Type (Saltwater)
NRTL Certified to UL 844
NRTL Certified to UL 1598 Marine Type
Certified Canadian Standards
Listed for Paint Spray Booths
California Title 24 Compliant

IP67 Rated - Waterproof

T6 Temperature Rating

NEMA 4X

LEL Listed LED Lamps
Approved for Confined Spares
Silicone Free
Factory Sealed Fixture
Emergency Battery Backup

Battery Backup Specs

Battery AC Input Voltage: 120-277V AC 60Hz

Battery AC Input Current: 90 mA

Battery AC Input Power Rating: 9.5W

Battery AC Output Current: 120V @ 165mA - 277V @ 72mA

Illumination Time: 90 Minutes

Battery Type: High Temp, Maintenance Free, Nickel Cadmium

Battery Lifespan: 7 to 10 Years

Battery Charge Current: 250 mA

Battery Recharge Time: 24 Hours

Special Orders - Special Requirements

Contact us for special requirements

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The Larson Electronics EPL-EMG-48-2L-LED-C Explosion Proof LED Light Fixture with red or blue lamps is NRTL Listed for United States and Canada approved Class I, Division 1 & 2 and Class II, Division 1 and 2 for areas where flammable chemical/petrochemical vapors exist or have the potential to exist. Equipped with a 90-minute emergency backup feature, this 4` explosion proof LED light has a T6 temperature rating and carries a paint spray booth light certification, making it ideal for applications such as paint booths, oil rigs, offshore applications, petrochemical, manufacturing, chemical storage, water treatment centers, and food processing plants.

This 4` two lamp LED fixture is ideal for operators seeking a top quality explosion proof light that will reduce operating costs, improve lighting quality and reduce downtime incurred from frequent servicing intervals. The 48-watt lighting system is equipped with Larson Electronics' specially designed LEDST-5 bulbs, with two blackout red or blue LED lamp with 6 individual LED light strips in each side. Each lamp has individual leads to be powered separately. Our LED-T series bulbs are visibly brighter than standard F17/T8`s and have consistently surprised many of our customers with their unexpectedly high light output levels.

These LED lamps produce 30% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. This LED light, with a total of 48 watts, draws only 0.4 amps at 120 volts AC. The EPL-EMG-48-2L-LED-C is universal voltage, not multi-tap, and operates on any voltage from 120V to 277V AC 50/60hz without any modifications. We also make a 10-30V DC version for low voltage applications for AC or DC power.

This fixture carries a T6 temperature rating and is approved for Class I Division 1, Groups C and D, Class I, Division 2, Group A, B, C and D, and Class II, Division 1 and 2, Groups E, F and G environments where flammable or combustible gases, vapors, dusts, fibers, and flying exist or stand the potential to exist. This LED linear fixture is approved for use in confined spaces.

Click here to read the NEC description for explosion proof and hazardous locations.

LED Benefits: We have eliminated the ballast box normally associated with explosion proof fluorescent fixtures which reduces overall weight and overall complexity of installation. There is no ballast in this unit and the included LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. These fluorescent LED lamps have internal drivers, eliminating external power components. The solid state design of the LED lamps give this fixture superior resistance to damage from vibration, extremes in temperature and a lamp service life over twice that of standard fluorescent bulbs. This second generation lamp is offered in 600-675nm wavelength red or blue for the blackout lamp.

Unlike the glass tube design of traditional fluorescent lamps, these LED T-Style lamps have no filaments or fragile housings to break during operation. Instead of using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. The LED assembly is mounted to the "tube" constructed from extruded aluminum, with a polycarbonate lens protecting the LEDs. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources

run significantly cooler than fluorescent lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional fluorescent lighting.

Emergency Backup: This emergency backup LED light contains a battery backup unit that adds emergency light functionality to the fixture. With an integrated emergency ballast, this explosion proof LED light will continue to operate one LED lamp for 90 minutes at 1,500 lumens after the main electrical power to the light is severed. Once standard electrical power is restored, the emergency battery pack will be recharged. The battery backup unit includes a switched leg for turning the light fixture on/off without kicking the unit into emergency mode.

Energy Consumption Comparison

	T5HO	T8	LED
Wattage	48 watts	34 watts	28 watts
Amp Draw @ 120V AC	0.40 amps	0.29 amps	0.23 amps
Amp Draw @ 220V AC	0.22 amps	0.16 amps	0.13 amps
Amp Draw @ 240V AC	0.20 amps	0.14 amps	0.12 amps
Amp Draw @ 277V AC	0.18 amps	0.13 amps	0.10 amps
Lamp Life Expectancy	20,000 hours	24,000 hours	50,000 hours
Operation cost per year (12hs/day @ 12c/kWh)	$25.23	$14.87	$14.72

Our EPL-EMG-48-2L-LED-C LED light fixture is NRTL Listed for United States and Canada approved for use in paint spray booths. Please note, according to the NEC, using threaded rigid pipe does not require additional seal offs with this fixture. An EYM and seal off is necessary for flex conduit or other non-rigid pipe implementations.

Mounting Options: Unless otherwise specified, our standard, most popular configuration is the bracket end mounting shown enlarged below. We also offer a pendant mount for those needing to suspend the fixture away from the ceiling surface (i.e. suspend from pipe or conduit). Additional mounting configurations can be customized to meet the requirements on the application. Please contact us for special mounting configurations.



Surface Mount (Standard)



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

Adjustable Surface Mount Brackets: Each bracket is cinched to the bracket mounting peg on each side of the light. The angle of the bracket is set by tightening two cap screws on either side of the bracket. The cap screws act as a set screw. The bracket itself is mounted via a single bolt hole at the top the bracket. There are two brackets, one on each end of the light. Once the brackets are mounted to a surface (ceiling, floor or wall), the light fixture can be removed from the brackets by

loosening the cap screws that hold the bracket to the mounting peg.



Pendant Mount (Optional)



Click Photo to Enlarge



3 Conduit Positions

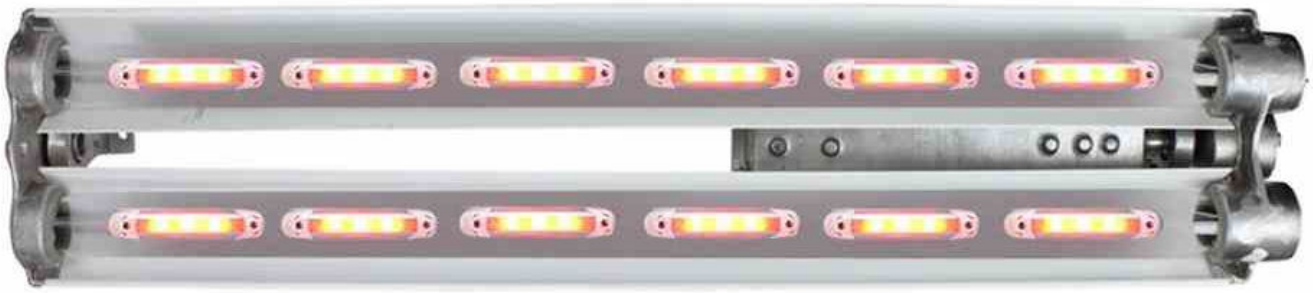


Click Photo to Enlarge

Suspension Mounting: Pendant mount fixtures hang from the ceiling and are suspended by rigid pipe. Each fixture features a 1/2" NPT junction box on one end, and a 1/2" NPT adjustable L-bracket on the other end of the fixture. Operators bring rigid pipe down to the threaded mounting hubs. Wiring is fed down through the rigid pipe to the junction box and tied in to the fixture's lead wires, completing the electrical connection. The adjustable L-shape mounting bracket provides support for the opposite end of the fixture.

Suggested Applications: Paint spray booths, aircraft maintenance, oil drilling rigs, refineries, solvent and cleaning areas, gas processing plants, chemical manufacturing, waste treatment plants, gas processing plants.

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.



Frequently Asked Questions (FAQ)