

EPL-24-2L-LV-SOL-SZT-50-DNMS

Explosion Proof Solar LED Light - 2' - 2 Lamps - C1D1 -Day/Night & Motion Sensor - Sub Zero Tolerant

Product ID: 146821



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-24-2L-LV-SOL-SZT-50-DNMS Explosion Proof Solar Powered Sub Zero Light

Wiring Hub: 1/2" NPT - 50' SOOW Cable
Lamp Dimensions: 27.5"L x 11.25"W x 8.5"H
Solar Panel Dimensions: 15.75"L x 11.375"W x 1"D
Weight: 32 lbs
Total Watts: 28 watts
Lumens: 3,500
Color Temp: 5300K
Beam Angle: 150°
Voltage: 12V DC Stepped Up to 120V AC
Runtime: 10 Hours
Charging Time: 5 Hours
Battery: (2) Cold Weather Batteries
LED Lamp Life Expectancy: 50,000+ Hours
Operating Temp: -40°C to +65°C
Mounting: Bracket Standard - Pendant Optional

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 and G
NRTL Certified to UL 844
NRTL Certified to UL 1598 Marine Type
NRTL Certified to UL 595 Outdoor Marine Type (Saltwater)
NRTL Listed for United States & Canada
12V to 120V DC to AC Inverter
Designed for Sub Zero Conditions

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-214-616-6180
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics EPL-24-2L-LV-SOL-SZT-50-DNMS Explosion Proof Solar Powered LED Light Fixture is NRTL United States and Canada Class I Division 1, Class II Division 1 and an ideal lighting solution for remote areas and standalone applications where connection to external power is either impractical or unavailable as well as for sub zero conditions. Special cold weather batteries allow this light fixture to continue to operate in sub zero conditions when most low voltage lights struggle to work well if at all. The

EPL-24-2L-LV-SOL-SZT-50-DNMS also features a day/night sensor and a motion sensor for further versatility.

This 2 foot long, 2 LED tube, explosion proof solar light fixture is ideal for use in remote locations requiring powerful yet compact hazardous location lighting that will improve overall illumination levels and light quality while reducing operating costs. This explosion proof LED light is powered by two cold weather batteries that are recharged by a 30 watt solar panel. A DC to AC inverter steps up 12V DC to 120V AC to allow the light to operate and perform even in sub zero conditions.

This solar panel is equipped with a day/night sensor and motion sensor. The day/night and motion sensor is programmed to activate the solar panel in the evening and to shut it off during the day while the motion sensor will activate the panel upon detecting motion.

The light runs for 10 hours when the cold weather batteries are fully charged. Charging time for the battery bank is 5 hours when exposed to direct sunlight. Indirect sunlight will extend the charge time. As with all solar powered equipment, charging time is affected by the amount of available ambient light. When ambient light levels drop below a certain level, such as on cloudy days, the unit will not recharge as quickly. The lead acid battery pack is contained within the solar panel, not the light.

[Click here for dimensional drawings for this explosion proof light.](#)



[Click Photo to Enlarge](#)



[Click Photo to Enlarge](#)



[Click Photo to Enlarge](#)



The EPL-24-2L-LV-SOL-SZT-50-DNMS is equipped with specially designed LED T-series bulbs which produce 15% more illumination at 8 feet as compared to standard T8 lamps when measured with an Extech light meter. Our LED-T series bulbs are visibly brighter than standard T8s and have consistently surprised many of our customers with their unexpectedly high light output levels. This 2 LED bulb explosion proof fixture is lighter in weight, has a slimmer profile, and produces more light than traditional explosion proof fluorescent fixtures. The 2 foot long T17 style LED tube design bulbs included with this unit are rated at 50,000+ hours of service life, which is nearly twice as long as standard T8 bulbs.

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.

We have eliminated the ballast box normally associated with fluorescent fixtures which reduces overall weight, creates a slimmer unit profile, and helps this LED fixture maintain a T-6 temperature rating. The solid state design of the LED lamps give this fixture superior resistance to damage from vibrations and extremes in temperature as well as a lamp service life over twice that of standard T8 bulbs. The 14 watt LED lamps produce more illumination than standard T8 bulbs. The LED bulbs used in this fixture are our new second generation LED T series 14 watt T17 style lamps which produce 15% more light than standard T8 bulbs when measured from eight feet. This fixture is operates on 12V DC for use with the low voltage solar panel. The fixture ships with 50 feet of SOOW cable and custom lengths are available upon request. Please contact us for special requirements.

NOTE: Larson Electronics has further upgraded the options available with this light. We expect the light to be mounted separately from the panel. This means the solar panel can be mounted in direct sunlight (not in the hazardous area) while the light is mounted in a hazardous area workspace. Standard installation for explosion proof lighting, including threaded rigid pipe to the LED light fixture and appropriate seal-offs, etc. are required.

Additional Mounting Options: Unless otherwise specified, our standard, most popular configuration is the bracket end mounting shown above. 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).

Standard Bracket Mounts: 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 of 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. The pictures shown above illustrate the side brackets. The third picture enlarged below also shows the brackets at the both ends of the light.

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 and areas where sub zero conditions are common.

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. Each unit dielectrically tested.
2. Fixture arrives assembled and lamped to reduce installation time and cost. Adjustable mounting brackets enable the operator to choose any mounting angle for the fixture.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy
4. No ballast box. No ballast to replace. We simply run the black wire to one end of the bulb and white wire to the other.
5. Heavy gauge extruded aluminum reflectors with high gloss reflective finish. Resists dents and corrosion.
6. A wrench is used to unscrew the end caps for relamping the fixture, while some competitive models require the "tap and

Superior LED Benefits

1. 50,000 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 LEED and other sustainable business certifications.
9. Bright, even light maintains consistent color over time.

knock off" method to loosen the end cap.

7. Explosion proof, impact and heat resistant Pyrex tubes provide lamp protection.

8. Special cold weather batteries allow this solar powered light to operate in sub zero conditions.

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.

15. California Title 24 Compliant









Frequently Asked Questions (FAQ)