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EPL-24-2L-LV-SOL-10C-MS-60C

Solar Powered Explosion Proof LED Lighting w/ Motion Sensor - 2 Foot, 2 Lamp Fixture - Class 1, Div. 1 - 60' Cord

Product ID: 273615



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-10C-MS-60C Explosion Proof Solar Powered LED Light Fixture w/ Motion Sensor

Lamp Type: Solar LED
Lamp Dimensions: 8.5"H x 27.5"L x 11.25"W
Solar Panel Dimensions: 11-3/8"L x 15-3/4"D
Weight: 32 lb

Voltage: 12 V DC

Battery: (2) 8aH Sealed Lead Acid Batteries
Runtime: 10 Hours
Charging Time 5 Hours
Total Watts: 28W
Lumens: 3,500
Luminous Efficacy: 125 Lm/W
LED Lamp Life Expectancy: 50,000+ Hours
Color Temp: 5300K
Color Rendering Index: >80
Beam Angle: 150°
Lighting Configuration: Wide Flood Beam
Power Efficiency: >90%
Power Factor: >0.85
Amperage: 2.3 A @ 12 V DC
Motion Sensor: Yes
Motion Sensor Coverage: 15' x 15' (Mounted @ 20' - 25')
Motion Sensor Wiring: 10' Cord for Remote Mounting
Motion Sensor Mounting: Adjustable Swivel Trunnion Bracket
Operating Temp Range: -40°C to +65°C
Operating Temp Rating: T6
Housing Material: Cast Aluminum

Ratings/Approvals

Class I Division 2 Groups A, B, C, D
Class II Division 1 & 2 Groups E, F, G
Class I, Division 1 Groups C & D
NRTL Certified to UL 1598 Marine Type
NRTL Certified to UL 595 Outdoor Marine Type (Saltwater)
NRTL Certified to UL 844
NRTL Listed for United States & Canada

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671

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Lens Material: Tempered Glass
Mounting: Bracket Standard - Pendant Optional
Wiring: 60' 12/2 SOOW Cord

Intl: 1-903-270-1187
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Made in Texas

The EPL-24-2L-LV-SOL-10C-MS-60C from Larson Electronics is an Explosion Proof Solar Power LED Light Fixture with Motion Sensor that is the ideal lighting solution for remote areas and standalone applications where connection to external power is either impractical or unavailable. This powerful yet compact hazardous location light delivers crisp, clean light while reducing operating costs. Charged by the 30 watt solar panel, two 12V AC 8aH sealed lead acid batteries provide constant, reliable power to the 2 tube, 28 watt fixture. This light fixture is motion activated and is equipped with a C1D1 remote mountable motion sensor on a 10` cord. The EPL-24-2L-LV-SOL-10C-MS-60C ships with a convenient 60` of 12/2 SOOW cord connecting the solar panel to the light fixture which allows operators to position the panel where the most ambient light is available.

Light Features: 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. The EPL-24-2L-LV-SOL-10C-MS-60C features our second generation LED T-series 14 watt T17 style lamps 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.

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 gives 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.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge





Charged by the 30 watt solar panel, two 12V AC 8aH sealed lead acid batteries provide constant, reliable power to the 2 tube, 28 watt fixture. These batteries are contained within the solar panel, not the light. The EPL-24-2L-LV-SOL-10C-MS-60C ships with a convenient 60` of 12/2 SOOW cord connecting the solar panel to the light fixture which allows operators to position the panel where the most ambient light is available.

The solar panel is equipped with either a day/night sensor and motion sensor or with an on/off switch. The day/night and motion sensor is programmed to active 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 on/off switch will activate and shut off the solar panel according to the operator`s preference. Operators can switch between modes with a toggle switch.

The EPL-24-2L-LV-SOL-10C-MS-60C provides 10 hours of continuous runtime when the battery is fully charged. Charging time for the battery bank is 5 hours when exposed to direct sunlight. As with all solar powered equipment, charging time is affected by the amount of available ambient light. Indirect sunlight and low ambient light levels, such as on cloudy days, will extend the charge time.

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. Solid state LED lighting is also safer for the environment as LEDs are 100% recyclable. And recycling simultaneously reduces operating costs by eliminating the need for the expensive special disposal services required with traditional gas burning and arc type lamps.

Motion Sensor: The EPL-24-2L-LV-SOL-10C-MS-60C is a motion activated light fixture. The light powers on when motion is detected. The included motion sensor is C1D1 rated and features adjustable sensitivity and time delay after motion. It provides up to 15` by 15` coverage when mounted at 20`-25`. The motion sensor is connected to the fixture via a 10` cord and can be mounted up to 10 feet away from the light fixture itself via an adjustable swivel trunnion bracket.

This unit leverages cutting-edge microwave sensors to detect motion. When in use, the device sends out discreet waves that are reflected back from nearby walls and objects (not heat or light). Microwave sensors are not affected by line of sight, resulting in wider and more accurate coverage of the target area. By comparison, traditional infrared sensors can only detect heat and light (factors used to identify movement) within the unit’s field of view. Microwave sensors also provide stable performance in unpredictable climates and can penetrate glass, plastic and other non-metallic objects.

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.

Power/Wiring: This EPL-24-2L-LV-SOL-10C-MS-60C is powered by two 12V AC 8aH sealed lead acid batteries that are recharged by a 30 watt solar panel. These rechargeable batteries provide a continuous supply of steady, reliable power. The lead acid battery pack is contained within the solar panel, not the light. This fixture ships

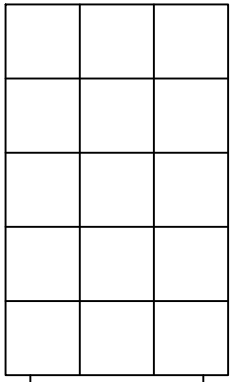
with 60 feet of 12/2 SOOW cord that connects the light fixture to the solar panel. Custom lengths are available upon request. Please contact us for special requirements.
Suggested Applications: Paint spray booths, Aircraft maintenance, Oil drilling rigs, Refineries, Solvent and cleaning areas, Gas processing 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.

REV	DESCRIPTION	DATE
A	PRODUCTION RELEASE	12/28/2021

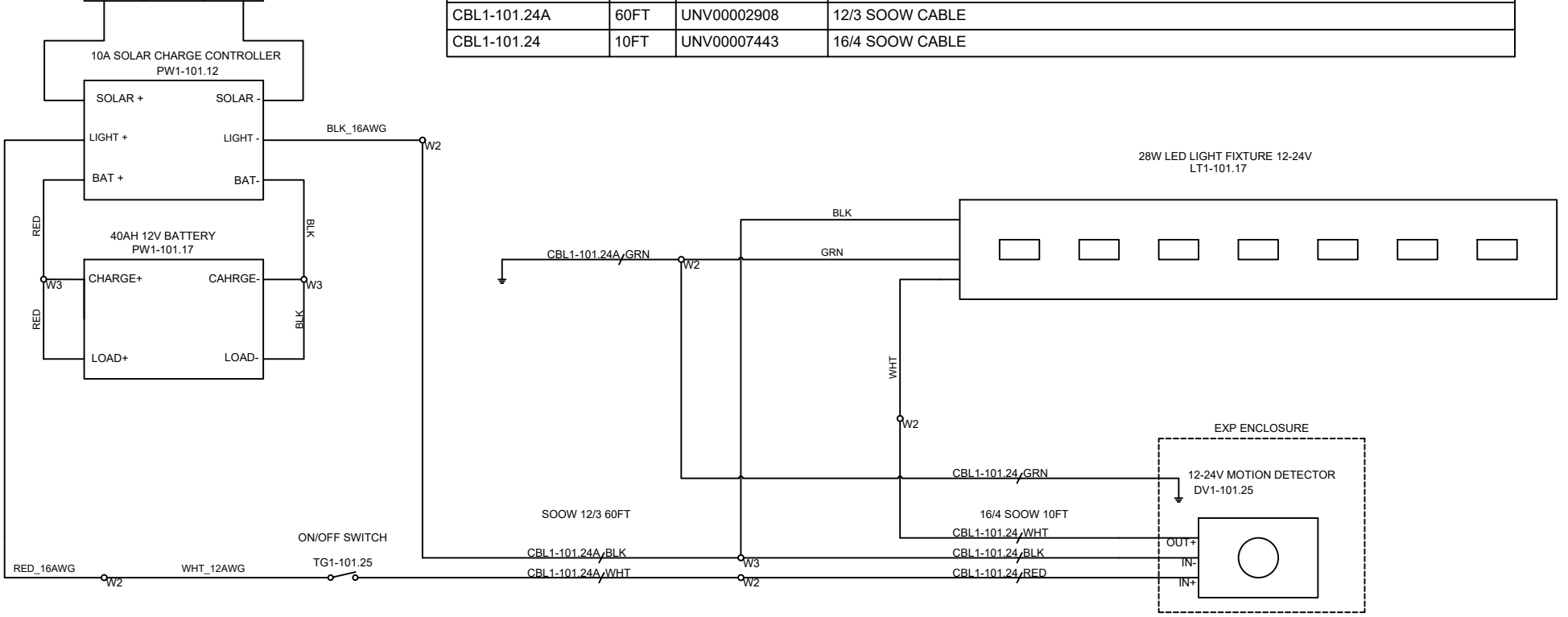
EPL-24-2L-LV-SOL-10C-MS-60C-SFC

LARSON ELECTRONICS®

30W SOLAR PANEL
PW1-101.07

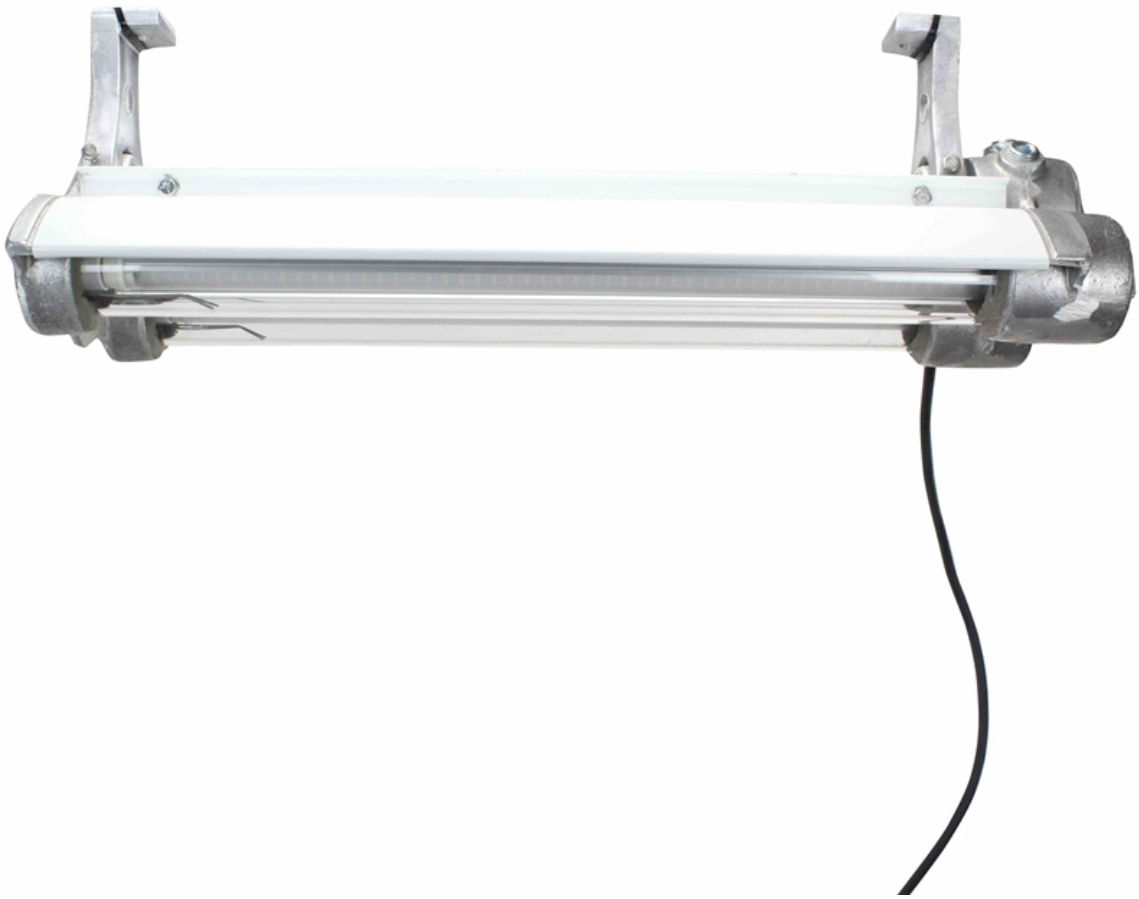


TAGS	QTY	CATALOG	DESCRIPTION
DV1-101.25	1	UNV00015488	12-24V MOTION DETECTOR
LT1-101.17	1	UNV00004296	2 foot 2 lamp - c1d1 - magnalight LED - low voltage 12-24 VDC
PW1-101.17	1	UNV00011977	40AH BATTERY - 12.6V - LI-ION
PW1-101.12	1	UNV00012607	10A SOLAR CHARGE CONTROLLER
PW1-101.07	1	UNV00014578	30W SOLAR PANEL
TG1-101.25	1	UNV00001905	ON/OFF TOGGLE SWITCH
W2	5	UNV00009802	2 HOLE WAGO
W3	3	UNV00011954	3 HOLE WAGO
CBL1-101.24A	60FT	UNV00002908	12/3 SOOW CABLE
CBL1-101.24	10FT	UNV00007443	16/4 SOOW CABLE



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TITLE			
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A. CIBISOVS	12/28/2021	A	
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Frequently Asked Questions (FAQ)