Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

EXPLED-SOL12-PT

Solar Power LED Explosion Proof Light - C1D1 - Strobe/Steady Burn - 30' 12/2 SOOW - Slip Fit Mount

Product ID: 147003



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.

EXPLED-SOL12-PT Solar Power LED Explosion Proof Light - C1D1 - Strobe/Steady Burn - 30` 12/2 SOOW - Slip Fit Mount
Operation: Automatic
Solar Panel Dimensions: W-11 3/8" L-15 3/4" D-1"
Lamp Dimensions: 7.44"-Diameter, 11.1" Height
Panel Watts: 30
Lamp Watts: 12
Charging Time: 5 Hours
Lumens: 1,600
Runtime: 12 Hours
Lamp Mounting: Slip Fit Yoke Mount w/ Adjustable Bracket
Panel Mounting: Flat Surface / Round/Square Pole
Battery: (2) 8aH sealed lead acid batteries
Wiring: 30 feet of 12/2 SOOW cord, Custom lengths Available on request.
Lamp Temp Rating: T6 - All Voltage and Temperature Ranges
Lamp Wiring Hub: 3/4" Threaded

UL Ratings For Light

Class I Div 1 - Groups C & D
Class I Div 2 - Groups A, B, C & D
Class II Division 2 - Groups F & G
NEMA 4X
T6 Temperature Rating
-55° C to 85° C Operating Temp
Suitable for Marine Environments

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The EXPLED-SOL12-PT from Larson Electronics is a Solar Powered Explosion Proof LED Light that is an ideal lighting solution for remote areas and standalone applications where connection to external power is either impractical or unavailable. This unit features a pole top slip fit mount with an adjustable swivel bracket. When ordering this solar powered LED light, please select the pole size.
This explosion proof LED light is powered by two 8aH sealed lead acid battery that is recharged by a 30 watt solar panel. Light output comes from a 12 watt LED lamp that produces 1,600 lumens. The light runs for 12 hours when the battery is fully charged. Charging time for the lead acid battery

is 5 hours when exposed to direct sunlight. Indirect sunlight will extend the charge time.
The EXPLED-SOL12-PT pole top slip fit mount explosion proof light features an adjustable swivel bracket constructed of 3/8" aluminum that allows 270° of adjustment and is attached to a slip fit yoke for easy installation. The slip fit yoke is built to customer`s specs, enabling operators to mount this explosion proof LED light to their specific pole size.
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.
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. This solar panel can be equipped with either a day/night sensor and a motion sensor or with an on/off switch. The day/night 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 on/off switch will activate and shut off the solar panel according to the operator`s preferences. The operator can switch between modes with a toggle switch.
The battery pack is contained within the solar panel, not the light. The illumination produced by the explosion proof LED light will cover an area approximately 55`L x 55`W when mounted 12 feet from the ground.

Mounting



Round Pole



Square Pole



Surface

This hazardous area light (Lamp Fixture only) is UL Listed Class I Division 1 Groups C and D, Class I Division 2 Groups A, B, C, D, and Class II Division 2 Groups F and G. These lights are also compliant with NEMA 4X standards and marine-rated for use in salt water environments. The high power LED cluster is protected by an internal cooling fin array that reduces heat build for longer LED life and higher light output consistency. An internal DIP switch allows operators to choose from steady on, single flash or double flash modes.
This explosion proof LED light contains a LED bulb that can serve to illuminate small works areas or draw attention to towers and other structures from a distance. This explosion proof LED light can be configured for steady burn or strobing applications. The housing on this LED light is constructed to NEMA 4X standards and is marine rated for salt water environments. The cast aluminum housing is made of high strength copper-free aluminum alloy with a baked powder epoxy finish. The fixture ships with 30 feet of 12/2 SOOW cable and custom lengths are available upon request. Please contact us for special requirements.
Mounting: The EXPLED-SOL12-PT pole top slip fit mount explosion proof light features

an adjustable swivel bracket constructed of 3/8" aluminum that allows over 270° of adjustment and is attached to a slip fit yoke for easy installation. The slip fit yoke is built to customer`s specs, enabling operators to mount this explosion proof LED light to their specific pole size. For example, selecting a 2" OD mount means that the yoke mount will fit onto pipes or bull horns with a 2" OD.

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.

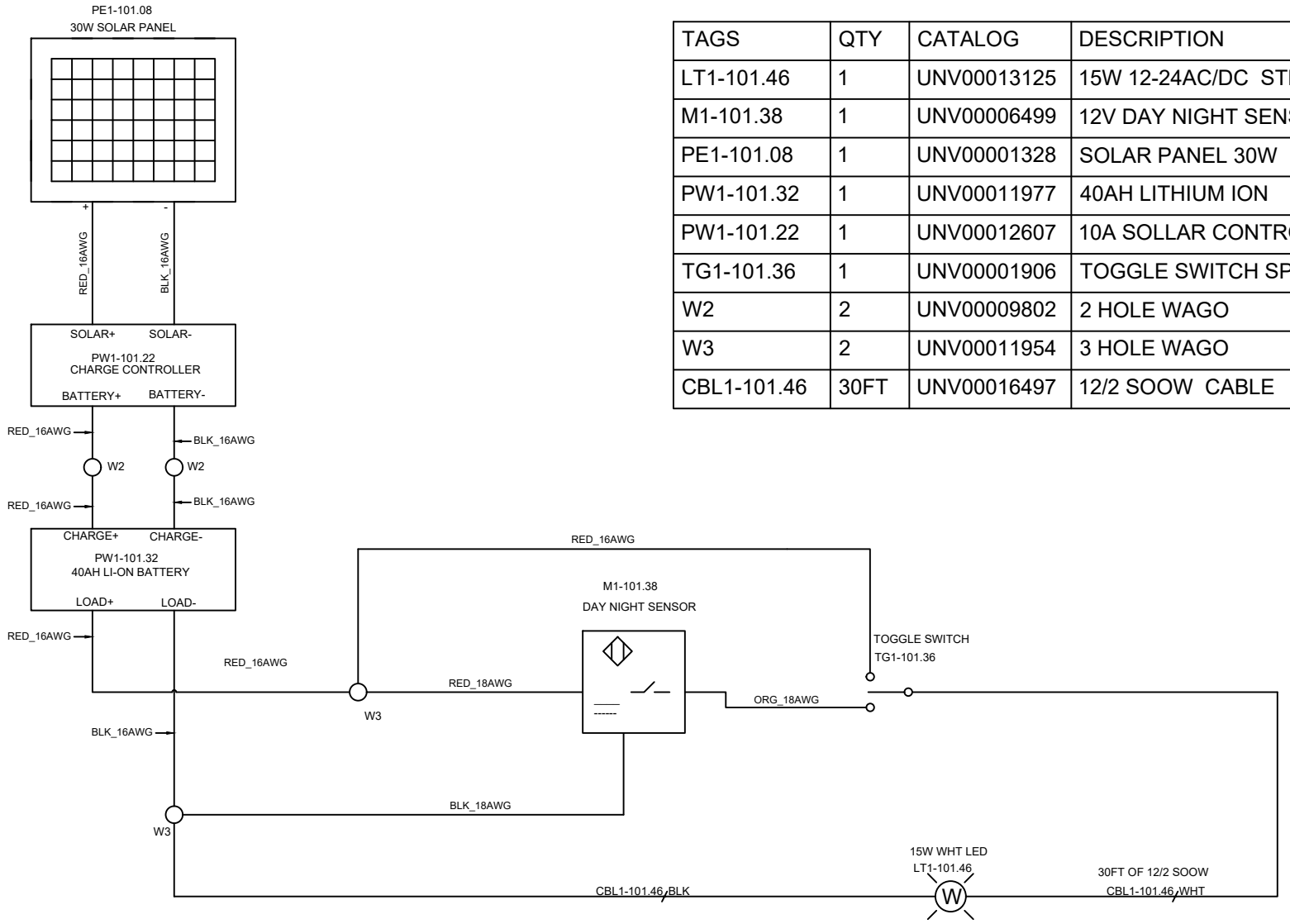
Larson Electronics offers a Class I, Division 2 rated panel solution for an additional cost. This incorporates a class rated panel, charge controller, and sealed battery solution. This allows the panel to be installed within C1D2 environments. No C1D1 rated solar panels exist, so the panel must be located outside the C1D1 environment in either panel solution offered.

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	11/23/2021

EXPLED-SOL12-PT-WHT-DF-2.5in

LARSON ELECTRONICS®



TAGS	QTY	CATALOG	DESCRIPTION
LT1-101.46	1	UNV00013125	15W 12-24AC/DC STROBE BULB
M1-101.38	1	UNV00006499	12V DAY NIGHT SENSOR
PE1-101.08	1	UNV00001328	SOLAR PANEL 30W
PW1-101.32	1	UNV00011977	40AH LITHIUM ION
PW1-101.22	1	UNV00012607	10A SOLLAR CONTROLLER
TG1-101.36	1	UNV00001906	TOGGLE SWITCH SPDT
W2	2	UNV00009802	2 HOLE WAGO
W3	2	UNV00011954	3 HOLE WAGO
CBL1-101.46	30FT	UNV00016497	12/2 SOOW CABLE

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KEMP, TX 75143

TITLE: EXPLED-SOL12-PT-WHT-DF-2.5in

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R.BLACK	1 OF 1	101




ON
OFF


ON
OFF


USE 75°C MIN. SUPPLY WIRE

MSDS for SLA Batteries

SECTION 1: PRODUCT NAME

Valve regulated lead-acid batteries.

SECTION 2: HAZARDOUS COMPONENTS

COMPONENTS	%WEIGHT	TLV	LD50 ORAL	LC50 INHALATION	LC50 CONTACT
Lead (Pb, PbO, PbSO) 24	About 70%	N/A	(500) mg/Kg	N/A	N/A
Sulfuric Acid	About 20%	1 mg/m^3	(2.140) mg/Kg	N/A	N/A
Fiberglass Separator	About 5%	N/A	N/A	N/A	N/A
ABS or PP	About 5%	N/A	N/A	N/A	N/A

SECTION 3: PHYSICAL DATA

COMPONENTS	DENSITY	MELTING POINT	SOLLUBILITY (H2O)	ODOR	APPEARANCE
Lead	11.34	327.4°C (Boiling)	None	None	Silver-Grey Metal
Lead Sulfate	6.2	1070°C (Boiling)	40 mg/L(15°C)	None	White Powder
Lead Dioxide	9.4	290°C (Boiling)	None	None	Brown Powder
Sulfuric Acid	About 1.3	About114°C (Boiling)	100%	Acidic	Clear Colorless Liquid
Fiberglass Sep.	N/A	N/A	Slight	Toxic	White Fibrous Glass
ABS or PP	N/A	N/A	None	No Odor	Solid

SECTION 4: PROTECTION

EXPOSURE	PROTECTION	COMMENTS
SKIN	Rubber gloves, Apron, Safety shoes	Protective equipment must be worn if battery is cracked or otherwise damaged.
RESPIRATORY	Respirator (for lead)	A respirator should be worn during reclaimation operations if the TLV is exceeded.
EYES	Safety goggles, Face Shield	

SECTION 5: FLAMMABILITY DATA

COMPONENTS	FLASHPOINT	EXPLOSIVE LIMITS	COMMENTS
Lead	None	None	
Sulfuric Acid	None	None	
Hydrogen	259?	4% - 74.2%	Batteries can emit hydrogen only if over charged (float voltage> 2.4 VPC). The gas enters the air through the vent caps. To avoid the chance of a fire or explosion, keep sparks and other sources of ignition away from the battery. Extinguishing Media: Dry chemical, foam, CO_2.
Fiberglass Sep.	N/A	N/A	Toxic vapors may be released. In case of fire: wear self-contained breathing apparatus.
478 Polystyrene	None	N/A	Temperatures over 300 °C (572°F) may release combustible gases. In case of fire: wear positive pressure self-contained breathing apparatus.

SECTION 6: REACTIVITY DATA

COMPONENT	Lead/lead compounds
STABILITY	Stable
INCOMPATIBILITY	Potassium, carbides, sulfides, peroxides, phosphorus, sulfurs.
DECOMPOSITION PRODUCTS	Oxides of lead and sulfur.
CONDITIONS TO AVOID	High temperature, Sparks and other sources of ignition
COMPONENT	Sulfuric Acid
STABILITY	Stable at all temperatures
POLYMERIZATION	Will not polymerize
INCOMPATIBILITY	Reactive metals, strong bases, most organic compounds
DECOMPOSITION PRODUCTS	Sulfuric dioxide, trioxide, hydrogen sulfide, hydrogen
CONDITIONS TO AVOID	Prohibit smoking, sparks, etc. from battery charging area. Avoid mixing acid with other chemicals.

SECTION 7: CONTROL MEASURES

1. Store lead-acid batteries with adequate ventilation. Room ventilation is required for batteries utilized for standby power generation. Never recharge batteries in an unventilated, enclosed space.

2. Do not remove vent caps. Follow shipping and handling instructions that are applicable to the battery type. To avoid damage to terminals and seals, do not double-stack industrial batteries.

STEPS TO TAKE IN CASE OF LEAKS OR SPILLS

If sulfuric acid is spilled from a battery, neutralize the acid with sodium bicarbonate (baking soda), sodium carbon (soda ash), or calcium oxide (lime).
Flush the area with water. Do not allow unneutralized acid into the sewage system.

WASTE DISPOSAL METHOD:

Neutralized acid may be flushed down the sewer. Spent batteries must be treated as hazardous waste and disposed of according to local state, and federal regulations. A copy of this material safety data must be supplied to any scrap dealer or secondary smelter with battery.

ELECTRICAL SAFETY

Due to the battery's low internal resistance and high power density; high levels of current can be developed across the battery terminals. Do not rest tools or cables on the battery. Use insulated tools only.
Follow all installation instruction and diagrams when installing or maintaining battery systems.

SECTION 8: HEALTH HAZARD DATA

LEAD: The toxic effects of lead are cumulative and slow to appear. It affects the kidneys, reproductive, and central nervous system. The symptoms of lead overexposure are anemia, vomiting, headache, stomach pain (lead colic), dizziness, loss of appetite, and muscle and joint pain. Exposure to lead from a battery most often occurs during lead reclaim operations through the breathing or ingestion of lead dusts and fumes.

THIS DATA MUST BE PASSED TO ANY SCRAP OR SMELTER WHEN A BATTERY IS RESOLD.

SULFURIC ACID: Sulfuric acid is a strong corrosive. Contact with acid can cause severe burns on the skin and in the eyes. Ingestion of sulfuric acid will cause GI tract burns. Acid can be released if the battery case is damaged or if the vents are tampered with.

FIBERGLASS SEPARATOR: Fibrous glass is an irritant of the upper respiratory tract, skin and eyes. For exposure up to 10F/CC use MSA Comfort with type H filter. Above 10F/CC up to 50F/CC use Ultra-Twin with type H filter.
NTP or OSHA does not consider this product carcinogenic.

SECTION 9: SULFURIC ACID PRECAUTIONS

INHALATION: Acid mist may cause respiratory irritation. Remove any individual from exposure, and apply oxygen if breathing is difficult.

SKIN CONTACT: Acid may cause irritation, burns or ulceration. Flush with plenty of soap and water, remove contaminated clothing, and see physician if contact area is large or if blisters form.

EYE CONTACT: Acid may cause severe irritation, burns, cornea damage and blindness. Call physician immediately and flush with water until physician arrives.

INGESTION: Acid may cause irritation of mouth, throat, esophagus and stomach. Call physician. If patient is conscious, flush mouth with water, have the patient drink milk or sodium bicarbonate solution.

DO NOT GIVE ANYTHING TO AN UNCONSCIOUS PERSON.

SECTION 10: TRANSPORTATION REGULATIONS

We hereby certify that all Larson Electronics Valve Regulated Lead-acid Rechargeable batteries conform to the UN2800 classification as "Batteries, wet, Non-Spillable, and electric storage" as a result of passing the Vibration and Pressure Differential Test described in D.O.T., 49 CFR 173.159(d), and IMO/IMDG, and ICAO/IATA packing instruction 872 and note A67.
Batteries having met the related conditions are EXEMPT from hazardous goods regulations for the purpose of transportation by DOT, and IATA/ICAO, and therefore are unrestricted for transportation by any means. For all modes of transportation, each battery outer package is labeled "NON-SPILLABLE". All our Batteries are marked non-spillable.

Updated: Nov. 20, 2012

Frequently Asked Questions (FAQ)