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SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM

1.8kW Portable Solar LED Light Tower - 24' Hydraulic Mast - (6) Panels, (2) LED Lights, SLA Battery Bank, Inverter, 3kW Diesel Gen - RM

Product ID: 316152



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.

SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM Trailer Mounted Solar Mast

Mast Specs

Mast Type: Telescoping, Hydraulic Tower
Boom Height: 8' to 24' (2.45M to 7.3M)
Stages: 5
Rotation: 270°
Operation: Hydraulic Powered/Controls
Materials: Steel
Finish: Powder Coated
Mast Head Mounting Provisions: Cameras, Wi-Fi Access Points, Network Equipment

Solar Specs

Panels: (6) 300W panels
Method of Deployment: Fixed Mount
System Voltage: 24V
Solar Charge Controller: (2) 40A MPPT
Battery Bank: (7) 200aH SLA Batteries
Battery Capacity: 1,400aH Total / 700aH Usable
Battery and PV Protection: Circuit Breaker
Battery Charger: 30A 240V w/ 6-30p Plug
Inverter: 3 kW 240V
Remote Monitoring: Battery, Trailer Indoor Temperature, Remote Access of Monitoring Devices
Circuit Breaker Box: Included

Quick Summary

24` Solar Light Tower
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Hydraulic Operation
(6) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
Battery Charger
Inverter
Scheduled Diesel Generator Operation
(2) 250W LED Lights
Waterproof LED Lights

Diesel Generator Specs

Rated Power: 3000W

Starting Watts: 3500W

Fuel Type: Diesel

Fuel Cell Capacity: -

Operation: Start/Stop Configurable Based on Battery Voltage, Scheduled Start/Stop

LED Lamp Specs
Lamp Quantity: (2)
Lamp Type: CREE LED
Total Watts: 500W (250W per lamp)
Total Lumens: 64,800 (32,400 per lamp)
Luminous Efficacy: 135 lm/w
LED Life Expectancy: 150,000+ hours
Color Temp: 5700K
Beam Angle: 10° Spot, 24° Wide Spot, 38° Narrow Flood, 60° Flood, or 90° Wide Flood
Optics Efficiency: 98% - PMMA High Transmittance Optics
LED Drive: 90%
Ambient Temp Range: -40°C to +80°C
Lamp Housing Material: Cast Aluminum
Lamp Lens Material: Polycarbonate
Lamp Settings: Automatic, Timed Interval, Manual (via 3-way Switch)

Trailer Specs
Materials: Steel

Trailer Dimensions: 16`L` x 6`W

Job Box: Included w/ Din Rail Mounting

Hitch: 2" Ball Coupler
Wiring: 7-Pin Flat
Axle: 3,500lb

Tongue: Removable

Outriggers: (4) Manual Crank

Wheels: (2)

Tires: 15"

Transport Dimensions: -
Weight: +-1200 lbs

Shipping: Common Freight
Shipping Dimensions: 14`L x 10`W x 12`H

Shipping Weight: -

Cross: Valiant Power VTS4P-L Solar Light Tower

Options: Length- Mounting-Fixtures/ Call Us for Special Requirements

Special Orders - Special Requirements

Contact us for special requirements
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Made in the USA
The Larson Electronics SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM Portable Trailer Mounted Solar Tower provides a safe and effective way for operators to secure and use customer-provided equipment at a maximum height of 24'. This solar mast assembly features a hydraulic tower with a removable mast head for storage when not in use. The unit features six 300-watt solar panels (fixed mount), an SLA battery bank, battery charger, inverter, diesel generator, two LED lights and trailer mounted job box.
PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO LIGHT MASTS OR LIGHT TOWERS
The SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM is a portable solar-

powered system for outdoor and remote locations. This unit consists of a 24' hydraulic mast, six 300-watt solar panels, SLA battery bank, battery charger, inverter, solar charge MPPT controllers, two LED lights and backup diesel generator. All components are mounted on a single-axle trailer. This system does not come with monitoring plans.

Operation:

- (6) 300W solar panels w/ (2) solar MPPT charge controllers
- (7) 200aH SLA batteries - 1,400aH total battery bank/700aH usable
- 30A 240V battery charger w/ 6-30p plug
- 3 kW inverter
- (2) 250W LED lights
- 3 kW diesel generator
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

LED Light Fixtures: This solar light plant is equipped with two of Larson Electronics GAU-LTL-250W-LED high output LED light fixtures. The LED lamps produce a total of 64,800 lumens of high intensity light. Twenty-four CREE high output LEDs producing 1,350 lumens each are arranged in rows and paired with PMMA high purity optics to produce a well focused 24° wide spot beam that is ideal for providing far reaching concentrated illumination while still covering a substantial amount of area. We also offer optional optics with 10° spot, 38° narrow flood, 60° flood, and 90° wide flood beam spreads. The spot beams are tightly focused and are designed for high elevation mounting to achieve distance, making spot versions ideal for high mast and spots lighting. The flood beams are designed to provide more light over a larger area nearer the fixture, making flood versions ideal for use as dedicated work and area lights. The LED lamp assembly is protected by a shatterproof polycarbonate lens.

As well as unparalleled heat control, the GAU-LTL-250W-LED series of LED lights from Larson Electronics also offer IP67 rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40° Celsius to +80° Celsius, are waterproof, and resist ingress of dust, dirt and humidity. The housings are formed from die cast aluminum and the optics are high transmission PMMA with 98% light transmittance. The CREE LEDs help these units achieve resistance to vibrations and are rated at 70% lumen maintenance after 80,000 hours of use. We recommend these LED lights for use in applications where a lot of vibration, dust, dirt, dampness and abusive working conditions are encountered.

Each LED unit is equipped with a back mount trunnion style mounting bracket that allows the light to be adjusted through 160° of vertical movement. To adjust the LED lamps, the user simply loosens the set screws located on either side of the unit, moves it into the desired position, then re-tightens the screws.

LED Technology: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. 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 applied and emitting light. 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 traditional 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 lighting.

Lamp Control: The LED lamps feature three settings for versatile operation, which is facilitated by a 3-way switch (automatic, timed interval and manual). Automatic operation is facilitated by a day/night (dusk to dawn) sensor, only turning the fixtures on when ambient light levels reach below 5 lux. Timed interval operation allows operators to set a timed schedule for the lamps. Manual operation includes standard on/off switch for manual override.

Outdoor Cameras: The SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM does not come with outdoor cameras or network video recorders. We can add

outdoor security cameras for monitoring remote sites at an additional cost.
PA System: This unit does not have a PA system. We can add a one-way or two-way system upon request and with additional costs.
Router/Wireless 4G Hotspot: This solar tower does not feature a professional-grade router. We can add a unit at an additional cost for remote operations requiring connectivity.
GPS Tracking: The system does not have GPS fleet tracking (we can add the feature at an additional cost). This feature enables operators to monitor the location of the solar-powered system easily. For models with GPS, cloud-based management tools enable access to the wireless network from compatible devices.
LED Strobe: The SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM does not come with a security LED strobe light. We can add a blue, red or white LED strobe light at an additional cost (combination of colors is also possible).



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Hydraulic Mast: The hydraulic telescoping, five stage steel light mast is designed to allow operators to quickly and safely deploy LED lights in locations where this equipment must be elevated to heights up to 24` (7.3M) for effective coverage. This light boom can be extended to 24` (7.3M) for maximum area coverage and collapsed to 8` (2.45M) for applications where a smaller footprint is required. This allows operators to collapse the mast and leave it in the upright position during transit if desired. The mast features hydraulic controls for raising and lowering.
A 44" wide and 2" by 2" by 1/4" thick mounting plate is attached to the upper section of the mast which provides a strong and stable platform for the LED lights. Mounting provisions are also available for customer-provided cameras and network equipment.
The LM family of telescoping towers feature a proprietary mast guidance system, which provide increased stability during high winds. When lowered, the mast can withstand winds up to 125 mph. When elevated to its full upright position, the mast can be rotated a full 270°. By loosening the T-Handle, operators can rotate the mast with ease in either direction. The mast can be positioned in one of four different directions, and locked back in place by re-tightening the T-handle. The mast itself spins freely and can typically be rotated with a single hand.
Solar Panel Assembly: This unit is comprised of six 300-watt solar panels, generating a total maximum output of 1.8 KW. The panels are mounted to a stationary assembly. The panels are wired to the solar charger control box which manages the charging system. The solar panels are mounted to a frame angled at 45° to capture the intensity of the sun for optimized light intake.
Batteries: The 24V solar unit contains a battery bank that consists of seven 200 aH SLA batteries. Total capacity is 1,400 aH with 700 aH usable. An included battery level indicator provides real-time power monitoring for the battery bank.
Solar Charge Controller: The solar-powered system features two 40A MPPT solar charge controllers.
Battery Charger: This system comes with a 30-amp 240V battery charger, which can be plugged into a local wall outlet during use, such as prior to deployment or when local power is available at the remote site. The device has a 6-30P plug.
Inverter: This unit comes with a 3 kW inverter that is compatible with 240V.
Diesel Generator: The SPLT-1.8K-HLM24-600AH-2X250LTL-3KWDG-INV-RM features a diesel generator on the trailer. This unit offers 3,000 watts of power (3,500 starting watts) and 120V output. Operators may access three receptacles and two USB ports on the generator for powering customer-provided equipment. An accessible dial enables selection of the following functions: Start, Run and Stop.
Component Control Center: All the electrical components are encapsulated in a

NEMA 3R job box that is bolted to the trailer. Since most of these components are not rated for high heat, our component cooling system circulates air within the job box at 1400 CFM when the ambient temperature exceeds 90 degrees Fahrenheit. The job box with din rail mounting components contains the component control system, includes locks for security purposes.

Trailer Assembly: The trailer itself is built on a 3500-pound rated axle and is approximately 16 feet long and 6 feet wide. The trailer is equipped with a removable tongue for storage, transport and security purposes. For an additional charge, we offer removable wheels in addition to the removable tongue for extra security. The four built-in outriggers can be slid out from the frame and pinned into place. A standard crank style support leg can be used to secure each outrigger to the ground. The feet are over-sized and equipped with through holes for additional ground anchoring mechanisms. All trailer lighting complies with DOT/FMVSS regulations.

Outriggers vs Leveling Jacks: The solar-powered system features manual-crank leveling jacks. Outriggers help expand the surface area for large equipment or loads. This differs from leveling jacks that are used to stabilize or level systems. Leveling jacks can be mounted to outrigger legs (or the side of the trailer).

Applications: Live events, law enforcement, military, commercial, industrial facilities, outdoor surveillance, remote locations and more.

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)