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SPLT-1.8K-30-2240AL-PTB-M1

1.8kW Portable Trailer Mounted Solar Tower - 30' Mast - (6) Panels, (56) LiFePO Batteries, BC, Inverter

Product ID: 278157

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



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-30-2240AL-PTB-M1 Trailer Mounted Solar Mast

Mast Specs

Tower Length: up to 30'
Stages: 5
Mast Head Length: 44"
Mast Head Base: Pan/Tilt
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (2) 1,000lbs Hand Winches, Electric Optional
Mast Cable: -

Solar Specs

Panels: (6) 300W panels

Method of Deployment: Fixed Mount

System Voltage: 12 Volts

Solar Charge Controller: (2) 40A MPPT

Battery Bank: (56) 40aH Lithium Iron Phosphate Batteries (LiFePO)

Battery Capacity: 2,240aH Total / 2,240aH Usable

Battery Charger: 30A 240V w/ 6-30P or L6-30P Plug

Inverter: 750W 120/240V

System Runtime: Full Operation @ 500W Draw on 120V for 5 Days Without Sun

Quick Summary

30` Solar Light Tower
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Manual or Optional Electric Operation
(6) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
Battery Charger
Inverter

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: -

Transport Dimensions: -

Weight: +-1200 lbs

Shipping: Common Freight

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

Shipping Weight: -

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-30-2240AL-PTB-M1 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 30`. This solar mast assembly features a manual crank tower with a removable mast head for storage when not in use. The unit features six 300-watt solar panels (fixed mount), a lithium-iron phosphate battery bank, battery charger, inverter and trailer mounted job box with din rail mounting components. The top of the five-stage mast features a pan/tilt base.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO LIGHT MASTS OR LIGHT TOWERS

The SPLT-1.8K-30-2240AL-PTB-M1 is a portable solar-powered system for outdoor and remote locations. This unit consists of a 30` manual crank mast, six 300-watt solar panels, LiFePO battery bank, battery charger, inverter, solar charge MPPT controllers, pan/tilt base at the top of the mast and job box with din rail mounting components. 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
- (56) 40aH LiFePO batteries - 2,240aH total battery bank/2,240aH usable
- 30A 240V battery charger w/ 6-30p or L6-30p plug
- 750W inverter
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

LED Lights: The SPLT-1.8K-30-2240AL-PTB-M1 does not have LED lights. We can add LED outdoor lights for illumination during nighttime operations at an additional cost.

Outdoor Cameras: The SPLT-1.8K-30-2240AL-PTB-M1 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-30-2240AL-PTB-M1 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).



Click Photo to Enlarge

Surveillance Tower: This five stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy equipment in locations where it must be elevated to heights up to 30` for effective coverage. This light boom can be extended to 30 feet for maximum area coverage and collapsed for applications where a smaller footprint is required. Constructed of square steel tubing, the manual crank mast is extended to its full height using an included 1,000 lbs hand winch.
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 equipment. An included pan/tilt base at the top of the tower provides operators with a remote way to control lights, cameras, and other equipment mounted to the base. An 8" by 10" mounting plate allows operators to mount a variety of user provided equipment to the top of the pan/tilt base, including LED and HID lights, cameras, and antennas. Wired and wireless remote controls are provided with this unit, providing flexibility in the field.
The pan/tilt base is constructed of die-cast aluminum and powder coated for added corrosion resistance. The internal gears of the device provide no slip and no "slop" during operation, and the pan/tilt base holds its position after movement has stopped. This pan/tilt base will keep its position during storms and strong winds, and holds up to vibrations in vehicle and offshore applications. The base is configured for remote software control via Pelco-D protocol. This allows operators to control the pan and tilt this unit from a computer control station.
Hard wired and wireless remote controls are both included with the base. The wireless remote control is operated from the wireless key fob, is battery operated, and controls up, down, left, right, and on/off. The hard wired remote provides 25` of cable with an Am phenol 10-SL waterproof disconnect.
The LM family of telescoping towers feature a proprietary mast guidance system, which provide increased stability during high winds. Four 1,000 lbs hand crank leveling jacks are used for leveling. The jacks can be leveled by hand crank or attachment provided for power drills. These components can be extended 2` out from the side of the trailer for added stability. When lowered, the mast can withstand winds up to 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.
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 solar unit contains a battery bank that consists of fifty-six, 40aH lithium iron phosphate batteries (LiFePO) for a 2,240aH battery bank (2,240aH usable). Compared to conventional SLA batteries, these units are 100% usable and lighter in weight. Over time, this results in lower operating and maintenance costs. 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 or L6-30P plug. We can add a 220V or 240V battery charger to power additional equipment from the solar tower at an additional cost (portable battery chargers are also available).
Inverter: This unit comes with a 750-watt inverter that is compatible with 120/240V.
Backup Generator: This unit does not come with a backup generator. We offer models with gasoline, LPG/LNG or diesel backup gensets (may come with additional costs). For systems with battery chargers and backup generators, the battery charger is connected to the genset by default. It is possible to unplug the battery charger from the generator for local charging.
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.

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Frequently Asked Questions (FAQ)

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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**