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SPLT-1.2K-LM30-BC

1.2 kW Solar Equipment Tower - 30' Five-stage Mast - 7.5' white Trailer - 240aH Lithium-ion Battery Bank -

Product ID: 285344

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-1.2K-LM30-BC Trailer Mounted 5-Stage Solar Tower

Mast Specs

Tower Length: 13.5` to 30`
Stages: 5
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Blue
Operation: (1) 1,000lbs Hand Winch
Cable: 3/16" Galvanized Aircraft Cable

Solar Specs

Panes: (4) 300 Watt Panels

Method of Deployment: Slider

System Voltage: 24 Volts

Solar Charge Controller/Energy Management: Included

Battery Bank: 240aH Lithium-ion Batteries

Battery Capacity: 240aH Total / 240aH Usable

Charger Type: Switching Regulator, Constant Voltage w/ Automatic Switch to Maintenance or Trickle Charge

Trailer Specs

Materials: Steel - Powder Coated white

Quick Summary

13.5` to 30` Mast
Steel Construction
Powder Coated white Trailer
Removable Mast Head
(4) Leveling Jacks
125 mph Wind Resistance
Manual or Optional Electric Operation
(4) 300 Watt Solar Panels w/ Sliders
Fully Solar, No Fuel Needed
Marine Grade Wiring for Outdoor Use

Trailer Dimensions: 7.5`L` x 7`W Trailer Bed - 10.75` Total Length

Accommodation: Accepts Standard Class II Drawbar and Hitch Pin for Tandem Towing

Tongue: Steel w/ Removable Hitch Pin for Pivoting Upwards in Storage

Coupler: Adjustable Height Coupler Mount - Accepts 2" Ball or 3" Pintle Ring Coupler w/ 5,000 lbs Minimum Capacity Rating

Axle: 2,500lbs Load Capacity

Suspension: Independent

Leveling Jacks: (4) 2,000 lbs Manual Swivel Screw Leveling Jacks - Pivot Up for Storage

Wheels: (2) Wheels - Grease Fittings for Wheel Bearing Lubrication at Axle Wheel Spindles

Tires: -

Tie-down Points: Yes, for Transport

Safety Chains: Yes, w/ Snap-type Hooks

Environmental/Operating Specs

Operating and Storage Temperature: -40°F to +185°F

Relative Humidity: 20% to 98%, Non-condensing

Mast Wind Resistance: 125 mph

Transport Position, Maximum Trailering Speed: 70 mph

Operating Position, Max. Height, Level Ground w/ Jacks Deployed: 90 mph Sustained w/ 4 sq. ft Surface Area of Equipment @ Top of Mast

Electrical Interference: Unaffected by RFI (Radio Frequency Interference) and EMI (Electromagnetic Interference)

Weight: +-600 lbs

Shipping: Common Freight

Shipping Dimensions: 8`-L x 8`-W x 12`-H

Shipping Weight: +-600 lbs

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-1.2K-LM30-BC Solar Equipment Tower provides a safe and effective way for operators to quickly deploy devices to elevations up to thirty feet. This mobile unit features a telescoping tower that folds over for easy transportation, a rotating boom that allows for 360° rotation and a removable mast head for storing equipment when not in use. This system features four, 300-watt solar panels and a 240 aH capacity lithium-ion battery bank. The entire assembly is mounted onto a powder coated white, 7.5` single-axle trailer, allowing operators to transport this solar tower from location to location.

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

Solar Powered Tower: This solar equipment tower includes four solar panels, solar charging system, lithium-ion battery bank, battery charger and manual crank up mast mounted on a powder coated white trailer with leveling jacks. The 1.2 kW solar generator system replenishes amp hours of usable battery capacity per day, assuming 5.5 hours of peak charging sunlight. This system delivers 24 volts for devices mounted atop the 30` telescoping mast.

The SPLT-1.2K-LM30-BC is supported by a lithium-ion battery pack, equating to 240aH battery capacity (240aH usable). A 120V battery charger provides flexibility during deployment, which allows operators to supply power to the batteries using an external power source. This feature is useful for fast turnaround projects, sustaining extended periods of illumination and remote sites that lack adequate exposure to sunlight.

Mast: This telescoping five stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy devices in locations where this equipment must be elevated to heights up to 30` for effective coverage. This light boom can be extended to 30` above the trailer floor for maximum area coverage, and collapsed to 13.5` for applications where a smaller footprint is required. The

powder coated blue mast is extended to its full height using an included 1,000lb rated hand winch with 3/16" galvanized steel cable.
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 equipment. When elevated to its full upright position, the mast can be rotated a full 360°. 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 positions, and locked back in place by re-tightening the T-handle. The mast itself spins freely with easy, and can typically be rotated with a single hand. The LM series of towers are powder coated for corrosion resistance and aesthetics.
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 to 13.5`, the mast can withstand winds up to 125 mph. Custom builds can be provided for higher wind speed resistance when fully raised.



44" Mast Head for mounting lights and equipment
Click Image to Enlarge



Mast folds over for transportation and when not in use
Click Image to Enlarge

Solar Panel Assembly: This unit is comprised of four 300-watt solar panels, generating a total maximum output of 1.2 kW. The panels are mounted securely on a sliding assembly. During deployment, the top solar panels slide out to form a four-panel array for maximum exposure to sunlight. The panels are wired to the solar charger control box which manages the charging system. When in use, the four solar panels are angled at 45° to capture the intensity of the sun for optimized light intake.
Batteries: The solar unit contains a 240aH lithium-ion battery bank, which are more reliable than wet batteries due to no spillage. Compared to conventional SLA batteries, these units are 100% usable and lighter in weight. Over time, this results in lower operating and maintenance costs.
Battery Charger: This system comes with a 120V battery charger. Options for the type of battery charger includes: switching regulator, constant voltage with automatic switch to maintenance or trickle charge.
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 that contains the component control system includes locks for security purposes.
Trailer Assembly: The entire assembly is mounted to a 7.5` by 7`, single-axle trailer via six 1/2" anchor bolts. The two-wheel trailer has a steel tongue with a removable hitch pin for pivoting upwards during storage and independent suspension. An adjustable height coupler mount is available for accepting a 2" ball or 3" pintle ring coupler (with minimum capacity rating of 5,000 lbs). Safety chains with hooks and accessible tie-down points allow for easy hookup and towing. A rugged and waterproof job box is included, safely secured to the trailer. Four leveling jacks at the corners of the trailer allow operators to level the trailer, and provide stabilization during deployment. All trailer lighting complies with DOT/FMVSS regulations.
Applications: Remote work locations, construction sites, military bases, camping sites, outdoor events, security applications, emergency services, outdoor lighting, portable lighting 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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Product ID: 285344

Export Control Classification Number (ECCN): EAR99

Options:

SPLT-1.2K-LM30-BC-Charge Type

Example: SPLT-1.2K-LM30-BC-SR

Charge Type	
SWITCHING REGULATOR	-SR
CONSTANT VOLTAGE W/ AUTO SWITCH TO MAINTENANCE	-AS
TRICKLE CHARGE	-TC

Links (Click on the below items to view):

- HigResPic1
- HigResPic2
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map