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SPLT-1.2K-LM30-680AL.24V-BC-NYC-2XCAT5-R1

1.2 kW Solar Equipment Tower - 30' Five-stage Mast, 7.5' Tan Trailer - (4) Panels, (8) 170aH LFP Batteries, 4G LTE/GPS

Product ID: 291874

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-LM30-680AL.24V-BC-NYC-2XCAT5-R1 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: 60A Charge Controller

Battery Bank: (8) 170aH 12V Lithium-iron Phosphate Batteries for 680 aH Battery Bank 24V

Battery Capacity: 16,000W of Total Battery Capacity

Cable: Nycoil Cable Wrapped Around Mast w/ (2) CAT5e Ethernet Cords

Cable Types: (1) Set of (+) and (-) 12V 12 AWG Cables Running to the Top of the Mast in the Nycoil Cable for Connecting to Customer-provided 24V DC Equipment; CAT5e Network Cords Terminated in a Job Box at the Top of the Mast and at Job Box for

Quick Summary

13.5` to 30` Mast
Steel Construction
Powder Coated Rustoleum NutMeg Tan 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
No Cameras, Lights, Strobe Lights or Recording Devices (Customer Must Provide Such Equipment)

Customer Equipment Connections

Router Specs

Wireless Router Type: Pepwave MAX BR1 MK2 Router w/ CAT6 LTE Advanced Modem (Wireless Access Network and Cell Network)
WAN Interface: (1) GE, (1) Embedded LTE-A Modem
LAN Interface: (1) GE
Wi-Fi Interface: 802.11ac/a/b/g/n 2x2 MIMO Simultaneous Dual-Band, Wi-Fi WAN & AP
Router Throughput: 100Mbps
4G Bands: FDD LTE- B1, B2, B3, B4, B5, B7, B8, B12, B13, B20, B25, B26, B29, B30, B41
3G Bands: WCDMA/HSPA+/DC-HSPA+- B1, B2, B3, B4, B5, B8
Recommended Users: 1-60
GPS Tracking: Built-in

Trailer Specs

Materials: Steel - Rustoleum NutMeg Tan

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-LM30-680AL.24V-BC-NYC-2XCAT5-R1 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 16,000-watt capacity lithium-iron phosphate battery bank. The entire assembly is mounted onto a powder coated Rustoleum NutMeg Tan, 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 charge controller, 24V lithium-iron phosphate battery bank, nycoil cable wrapped around the mast with two CAT5e ethernet cords and manual crank up mast mounted on a powder coated 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.
Cameras, recording devices and lights are not included with this system. Customer must provide these components.
Operation:

- (4) 300W solar panels w/ 60-amp solar charge controller
- (8) 170 aH lithium-iron phosphate batteries - 16,000 watts total capacity
- Nycoil cable wrapped around mast w/ (2) CAT5e ethernet cords
- 4G LTE router and GPS
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

Outdoor Cameras: This trailer mounted system does not have any cameras. We can add cameras at an additional cost.
Network Video Recorder: The solar assemble does not come with a network video recorder we can add a network video recorder 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: Operators can connect to wireless access points or cellular networks via a professional-grade router. The unit supports WAN, LAN and Wi-Fi interfaces with 100Mbps throughput capabilities. Recommended for 1-60 users, this device works with all major carriers (CDMA/GSM/LTE).
GPS Tracking: The router is equipped with built-in GPS fleet tracking. This feature enables operators to monitor the location of the solar-powered system easily. Cloud-based management tools enable access to the wireless network from compatible devices.
LED Strobe: The SPLT-1.2K-LM30-680AL.24V-BC-NYC-2XCAT5-R1 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).
Mast: This telescoping five stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy customer-provided 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 24V lithium-iron phosphate battery bank with 16,000 watts of total capacity, 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.
Solar Charge Controller: The solar-powered system features a 24V, 60-amp solar charge controller.
Battery Charger: This system does not come with a battery charger.
Cables: The solar unit comes with nycoil cable wrapped around the mast with two CAT5e ethernet cords. One set of (+) and (-) 12V 12 AWG cables running to the top of the mast in the nycoil cable is available for connecting to customer-provided 24V DC equipment. Operators can access CAT5e network cords terminated in a job box at the top of the mast and at the job box for customer-provided equipment connections.
Inverter: This unit does not come with an inverter. We can add an inverter to power additional equipment from the solar tower at an additional cost.
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 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: 291874

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

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