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SPLT-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200

30' Portable Solar Equipment Tower w/ Backup Diesel Genset - (2) Solar Panels, 240aH Li-ion Battery Bank, Wiring Box - Router, 200 lb Capacity

Product ID: 330796

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



Image: SPLT-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200

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-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200 Trailer Mounted Solar Equipment Mast

Mast Specs

Tower Length: 13.5` to 30`
Stages: 5
Payload Capacity: 200 lbs
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: (1) 1,000lbs Hand Winch
Mast Cable: 3/16" Galvanized Aircraft Cable
Cable Sheath: Sealtight Coiled Tubing
Wiring Box (Top of Mast): 6" x 6" x 4"

Solar Specs

Panels: (2) 300 Watt panels
Method of Deployment: Fixed Mount - No Sliders
System Voltage: 12 Volts
Solar Charge Controller: 40A MPPT
Battery Bank: (6) 40aH Lithium-ion Batteries
Battery Capacity: 240aH Total / 240aH Usable

Quick Summary

13.5` to 30` Solar Surveillance Tower
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Manual or Optional Electric Operation
A-Frame for Mounted (2) 300 Watt Solar Panels
SAEJ845, Class 1 LED Strobe
5kW Backup Diesel Generator
Foldable Tongue
Lockable Job Box

Battery Charger: 120V AC

Inverter: 200W, 120V

Backup Diesel Generator Specs

Dimensions: 26.6" x 22.6" x 33.1"

Weight: 247 lbs

Engine: Yanmar, 435 CC Air Cooled

Rated Power: 5,000W (5,500W Surge Watts)

RPM: 3,600

Fuel Type: Diesel

Fuel Capacity: 12 Gal w/ Plastic Fuel Tank and Gauge

Run Time @ 50% Load: 32.4 Hours

Starting System: Recoil & Electric - 12V Button Start

Auto Start/Auto Shut Off: Auto Start When Battery Bank and Sunlight are Low; Auto Shut Off When Batteries are Charged

Monitoring: Hour Meter, Low Oil Alert/Shutdown

Voltage: 120/240V AC, 1-phase

Frequency: 60 Hz

Rated Amps: 21A

Receptacles: (1) NEMA L14-30R, (1) NEMA L5-30R, (2) NEMA 5-20R GFCI

Battery Charger Connection: To Backup Generator (Default)

LED Strobe Specs

Lamp Type: LED Strobe (Blue)

Dimensions: 4.5" x 6.5" - D

Voltage: 12 or 24V DC

Watts: 14.4W

Lumens: 1,440

Luminous Efficiency: 100 LPW

Lighting Configuration: Strobing Flash

LED Life Expectancy: 50,000+ Hours

Operating Temp Range: -45°C ~ +55°C

Materials: Polycarbonate Lens

Router/Antenna Specs

Router Type: Pepwave Surf SOHO Router

WAN Interface: 1x 100/1000M Ethernet Port, 1x USB 2.0 Interface, Wi-Fi as WAN

LAN Interface: 4x 100/1000M Ethernet Ports, Simultaneous Dual-Band 11ac Wi-Fi AP

Wi-Fi AP Operating Frequency: 2412 - 2472MHz and 5180 - 5825MHz

Wi-Fi Data Rates: 3x3 MIMO, 2.4GHz: 450Mbps or 5GHz: 1300Mbps

Wi-Fi Antenna: 3x External Wi-Fi Antenna

Router Throughput: 120 Mbps

Power Input: DC Jack: 10V - 24VDC AC Adapter: AC Input 100V - 240V, DC Output 12V, 3A

Power Consumption: 26W (w/ USB WAN), 22W (w/o USB WAN)

Dimensions: 9.17` x 5.6` x 1.18`

Weight: 0.86 lbs

Humidity: 15% - 95% (Non-condensing)

External Antenna Frequency: 690~960 MHz, 1710~2170 MHz, 2500~2700 MHz

External Antenna Gain: 5dB

External Antenna Height: 12`

Trailer Specs

Materials: Steel

Trailer Dimensions: 10`L x 6`W (Trailer Bed) - 14`L (Tow Length)

Trailer Footprint: 14.65`L x 12.91`W

Wiring: 7-Pin Flat

Axle: 3,500lb

Suspension:

3,500 Lb 4-Leaf Double Eye Springs
Leveling Jacks: (4) 1,000 Manual Leveling Jacks
Wheels: (2) 15" 5x4.5 Steel Rims
Tires: ST205/75/D15 H188
Hitch: 2" Ball Coupler
Weight: +-1200 lbs
Shipping: Common Freight
Shipping Dimensions: 14`L x 10`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-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200 Portable Solar Equipment Tower w/ Backup Genset provides a safe and effective way for operators to deploy lights, cameras and devices from elevated positions between 13.5` to 30`. This solar assembly features a telescoping tower with a rotating boom that allows 360° rotation and a removable mast head for storage when not in use. The unit has two 300-watt solar panels, a 240aH capacity lithium-ion battery bank, router, inverter and a 120V battery charger for powering the batteries when sunlight is unavailable, as well as a 5kW backup generator.

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

The SPLT-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200 is a complete, portable solar-powered system for outdoor and remote locations. This unit consists of a a 13.5`-30` mast, two 300-watt solar panels, lithium-ion battery bank, solar charge MPPT controller, battery charger, inverter, blue LED strobe fixture, router, a 5kW backup diesel generator and a 6" x 6" x 4" wiring box for completing cable connections for mounted equipment. All components are mounted on a single-axle trailer. In a fully collapsed position, the mast is capable of clearing standard bridges making it ideal for towing on roads. This telescoping mast does not fold over.

Operation:

• (2) 300W solar panels w/ solar MPPT charge controller

• (6) 40aH lithium-ion batteries - 240aH total battery bank/240aH usable

• 5kW backup diesel generator w/ auto start and auto shut off

• 120V battery charger

• 120V, 200-watt inverter

• 6" x 6" x 4" wiring box at top of mast

• Blue LED strobe (deterrent)

• Router

• All system components secured to a DOT-approved trailer

• Trailer comes with (4) leveling jacks and vin#

Lights: This solar-powered system does not come with lights. We can add flood lights, spotlights or additional infrared lights to this unit upon request and with additional costs.

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 Verizon 4G internet via a professional-grade router. The unit supports dual-band 2.4 GHz (450 Mbps) and 5 GHz (1,300 Mbps), as well as 3x3 MIMO. Stateful firewall and DoS prevention ensures secure network usage during operation. Settings and configurations are controlled via a cloud-based smartphone app or web-based computer program. An external antenna is available for signal boosting and extending hotspot coverage. The antenna measures 12` and offers compatibility with the following frequencies: 690~960 MHz, 1710~2170 MHz and 2500~2700 MHz.

GPS Tracking: This system does not feature GPS tracking (we can add GPS tracking at an additional cost).

LED Strobe: The SPLT-.6K-LM30-CL1B.B-VT2-ISDG-TLR10-W4G-200 features a Class 1 blue LED strobe lamp as a deterrent. This compact, high powered LED beacon contains an LED lamp assembly that produces 360° of brilliant blue light without the dark spots or unevenness of traditional incandescent beacon lights. This beacon is equipped with auxiliary LEDs on top, helping to make this a Class 1 rated beacon and capable of producing a brilliant flashing pattern that is visible at extended distances. We offer other strobe colors upon request (may come with additional cost).

This LED beacon has 30 flash patterns including four simulated rotating patterns that can be changed via a toggle switch from the control box. This waterproof beacon has a black powder coated die cast base that contains a fully potted circuit board. A clear polycarbonate lens protects the LED assembly and the housing is waterproof, shock resistant and built for for reliable and durable operation.

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.



Click Photo to Enlarge



Click Photo to Enlarge

Surveillance Tower: This telescoping 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 tower 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 tower is constructed of square steel tubing with a base section 6.6` in length and 6" by 6" by 3/16" thick, lower section 6.78` `in length and 5" by 5" by 3/16" thick, middle section 6.93` in length and 4" by 4" by 1/8" thick, upper section 7.08` in length and 3" by 3" by 1/8" thick, and top section 7.58` in length and 2" by 2" by 1/8" thick. Each section has a 1`+ overlap. The mast is extended to its full height using an included 1,000lb rated hand winch with 3/16" galvanized steel cable. Junction boxes are mounted at the top of the first stage and at the very top of the mast for equipment setup, connection, and deployment.

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. Operators may access a 6" x 6" x 4" wiring box at the top of mast for completing electrical connections for mounted 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 easy 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 with glossy blue finish for corrosion resistances 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.



Click Photo to Enlarge

Solar Panel Assembly: This unit is comprised of two 300-watt solar panels, generating a total

maximum output of 0.6 KW. The panels are mounted to a stationary assembly and does not contain sliders. We offer systems with additional panels that deploy outwards using sliders. The panels are wired to the solar charger control box which manages the charging system. The two solar panels are mounted to a frame angled at 45° to capture the intensity of the sun for optimized light intake.

Batteries: This unit contains a battery bank that consists of six, 40aH lithium-ion batteries for a 240aH battery bank (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 that provides real-time power monitoring for the battery bank.

Solar Charge Controller: The solar-powered system features a 40A MPPT solar charge controller.

Battery Charger: A 120V battery charger can be used for powering the batteries when sunlight is unavailable This component is plugged into the backup generator by default. The battery charger can be unplugged for charging with local power sources.

Inverter: This unit has a 120V inverter, which is capable of powering up to 200 watts of devices.

Backup Generator: This solar tower features a 5kW backup diesel generator. Equipped with a 12-gallon plastic fuel tank with gauge, this generator is powered by a 435CC air cooled Yanmar engine that runs on diesel, and is started by a 12V push button (battery not included) with recoil backup. Receptacles on the generator include: (1) NEMA L14-30R, (1) NEMA L5-30R and (2) NEMA 5-20R GFCI. This genset will automatically kick on when the battery bank and sunlight levels are low. Automatic shut off occurs when the battery bank is charged to a specific level. We offer models with LPG/LNG or diesel backup gensets (may come with additional costs).

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 10` (trailer length) x 10` (trailer bed) x 14` (tow length), single axle trailer via six 1/2" anchor bolts. Trailer length refers to the measurement from the hitch to the rear bumper. The trailer bed refers to deck space that holds system components and equipment (not including tires, hitch, bumper and external trailer components). This two-wheel trailer is equipped with 3,500 lbs axle and leaf springs with 15" trailer tires. A standard 2" ball coupling, two standard safety chains, and 7-pin flat trailer plug allow for easy hookup and towing. The trailer tongue can be folded up for seamless storage. A rugged and waterproof job box is included, safely secured to the trailer. Leveling jacks on the trailer allow operators to level the trailer, and provide stabilization during deployment. 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, 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)

There are no Faqs

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