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SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2

24' Solar Security Light Tower - 7.5' Trailer - 24V, (4) Panels, (4) 160W LED Lamps, (2) PTZ Cameras, NVR, Batteries, BC - GPS/Router, Black Trailer

Product ID: 336505

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



Image: SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2

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-LM24-4X160W-24V-1600AHL-2XPTZ-NVR-W4G-BC-R2 Trailer Mounted Solar Light Mast

Mast Specs

Tower Length: Telescoping 8' to 24"
Stages: 5
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Blue
Operation: Manual Winch
Mast Cable: 3/16" Galvanized Aircraft Cable

Solar Specs

Panels: (4) 300 Watt panels
Method of Deployment: Fixed Mount
System Voltage: 24 Volts
Solar Charge Controller: MPPT
Battery Bank: (8) 200aH SLA Batteries
Battery Capacity: 1600aH Total / 800aH Usable
Battery Charger: 50A 120V
Inverter: -
System Runtime: -

Quick Summary

8' to 24' Solar Light Tower
Steel Construction
Powder Coated Blue Mast Finish
Removable Mast Head
125 mph Wind Resistance
Manual Winch Operation
(4) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
120V Battery Charger
Foldable Tongue
(4) Dimmable LED Fixtures
White Lockable Job Box

LED Fixture Specs

Lamp Qty: (4)
Lamp Technology: LED, Dimmable
Voltage: -
Total Watts: 640W
Single-lamp Watts: 160W
Total Lumens: 81,000 lms (20,250 lms per Light)
LED Lifespan Expectancy: 50,000+ Hours
Color Temp: -
Beam Angle: -
Beam Configuration: Flood
Switches: Manual On/Off, Dimmer Switches for Independent Lamp Control
Sensor Type: Day/Night
Timer: Included
Materials: -
Mount: Mast

PTZ Camera Specs

Unit Type: PTZ Security Camera
Camera Qty: (2)
Total Watts: 25.5 (Max)
Voltage: 24V AC (PoE - 802.3at)
Image Sensor: CMOS
Connectors: 1.0Vp-p, 75 Ohm, BNC
Effective Pixels: 2.1 MP, 1920 x 1080 Resolution
Min. Illumination: 0.02 Lux @ F1.6 AGC On, 0 Lux w/ IR
Electronic Shutter: 1 ~ 1/10,000s
Lens: 4.7-94mm Varifocal Lens
Angle of View: 58.3° (Wide) ~ 3.2° (Tele)
Optical Zoom: 33x
Day/Night: ICR
IR Distance: 492` (850 nm)
Video Framerate: 1080p @ 30fps
Video Offload: MP4
Video Output: (1) BNC
Language: English
Ambient Temperature Range: -22°F to 149°F
Housing Materials: Aluminum
Lens Material: Polycarbonate
Mounting: Tower

NVR Specs

Device Type: Network Video Recorder
Storage Capacity: 2 TB SATA Hard Drive
Channels: 8
Camera Resolution Support: Up to 8MP
Installation Type: Plug and Play
Incoming Bit Rate: 40Mbps
Outgoing Bit Rate: 80Mbps
FPS: 60fps Per Channel
Compression Format: H.265, H.264, H.264 OVC

Recording Modes: Continuous, Schedule, Event, Motion Detection, VCA

Export Format: MP4

Video Outputs: (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (Front), (1) USB 3.0 (Rear)

Two-way Audio Input: 1-ch, RCA

Power Over Ethernet: = 120W, Supported Standards- 802.3af and 802.3at

Alarm Input: 4x (Rear Panel), Camera Dependent

Alarm Output: 1x (Rear Panel), Camera Dependent

Protocols: IPv4, TCP/IP, UDP, HTTP, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, ONVIF, HTTP Multipart

Power Requirements: 100 ~ 240V AC

Housing Material: Aluminum

Operating Temp: 14°F ~ 131°F

Networking Cable: CAT5E

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

Trailer Finish: Powder Coated Flat Black w/ Red and White Conspicuity Tape

Wiring: 7-Pin Flat Connector, 7-pin to 6-pin Adapter Included for 6-pin Tow Vehicles

Axle: 3,500 lb

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 Hitch, Tilting Drawbar

Transport Dimensions: 160.68"-L x 88"-W x 81.15"-H

Weight: +-1500 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-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2 Portable Solar Security LED Tower provides a safe and effective way for operators to

illuminate and monitor outdoor locations from elevated positions up to 24`. This solar assembly features a telescoping tower with a removable mast head for storage when not in use. Equipped with four LED dimmable lights generating 81,000 lumens, the unit has four 300-watt solar panels (fixed mount), SLA battery bank, two PTZ cameras, NVR, router, 120V battery charger and lockable job box. All system components are secured to a towable trailer.

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

The SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2 is a complete, portable solar-powered outdoor LED system for remote locations. This unit consists of a 24' telescoping mast with manual winch, four 300-watt solar panels, four LED fixtures, SLA battery bank, two PTZ cameras, NVR, router, 50A battery charger and solar charge MPPT controller. All components are mounted on a single-axle trailer. This system does not come with monitoring plans.

Operation:

- (4) 300W solar panels w/ solar MPPT charge controller
- (8) 200aH SLA batteries - 24V
- (2) PTZ cameras
- Router with GPS
- NVR
- (4) 160-watt dimmable LED fixtures
- 50A 120V battery charger
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

LED Fixtures: The SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2 features four, 160-watt dimmable LED lights for outdoor illumination. The lights generate up to 81,000 lumens at 20,250 lumens per fixture. These LED lamps are equipped with a flood beam configuration for wide-area lighting. Settings for the LED fixtures include: timer or day/night operation. Operators may access a manual on/off switch and dimmer switches for independent light control on the system.

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.

PTZ Cameras: Two PTZ security cameras provide operators with crisp 1080p full-HD high resolution images from the top of the mast. A 4.7-94mm varifocal lens automatically adjusts focus, providing operators with precise 33x optical zoom levels. Integrated long-range IR LEDs, with a wavelength measurement of 850 nm, enable the day/night camera to see distances up to 492` under nighttime conditions. This unit offloads videos in MP4 format and features H.264 and MJPEG video compression. The IP security camera is designed to perform in outdoor locations and rainy conditions. This IP66-rated unit resists the negative effects of non-corrosive liquids. De-fogging features enable the unit to operate in rainy and foggy conditions.

NVR: The solar tower contains an 8-channel NVR that can be used with the network cameras. Setup only takes minutes via plug-and-play, which automatically detects, displays and configures system components. With multiple recording modes (Schedule, Continuous, Motion Detection and Event) and 2TB of storage, users could capture hours of footage with ease. The remote configurable network recorder features a bit rate of 40Mbps incoming and 80Mbps outgoing at up to 60fps per channel. To maximize storage, the unit supports H.265, H.264, and H.264 OVC video compression.

The network recorder is compatible with two-way audio streaming (camera dependent) and includes 9 ethernet ports (RJ-45 interface). During recording, the unit handles the following data: activity log, email notification, event log, event notification, video analytics and event search. This device offloads videos in MP4 format. Cameras hooked up to the NVR-POE-8CH-2TB may use power directly via PoE (802.3af / 802.3at) during operation. The NVR runs on 100 - 240VAC of power and is suitable for use in temperatures between 14°F - 131°F.

NVR Inputs: (1) RCA, 4 Sensor Inputs

NVR Outputs: (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (front), (1) USB 3.0 (rear)

Router/Wireless 4G Hotspot: Operators can connect to 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.

LED Strobe: The SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2 does not have a blue 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

Light Tower: This five-stage steel mast from Larson Electronics is designed to allow operators to quickly and safely deploy the LED lights in locations where they must be elevated to heights up to 24` for effective coverage. This light boom can be extended to 24` for maximum area coverage and collapsed to 8` for applications where a smaller footprint is required. The tower is constructed of square steel tubing with a base section 5.92` in length and 6" by 6" by 3/16" thick, lower section 6.04` in length and 5" by 5" by 3/16" thick, middle section 6.19` in length and 4" by 4" by 1/8" thick, upper section 6.34` in length and 3" by 3" by 1/8" thick, and an top section 6.5` 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 2,500 lbs manual winch with 3/16" galvanized steel cable.

The LM series of towers are powder coated with glossy blue finish for corrosion resistance and aesthetics (this mast is powder coated blue). 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 light fixtures.

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 collapsed, 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 four 300-watt solar panels, generating a total maximum output of 1.2 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 eight 200aH SLA batteries for a 1600aH battery bank (800aH usable). An included battery level indicator that provides real-time power monitoring for the battery bank.

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

Battery Charger: This system comes with a 50-amp 120V 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. 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 does not have an inverter. We can add one to the system at an additional cost.

Backup Generator: This unit does not have 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. 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 (a 7-pin to 6-pin adapter is also included for 6-pin tow vehicles). 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, 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)

There are no Faqs

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Product ID: 336505

Export Control Classification Number (ECCN): EAR99

Options:

SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2-Mast Finish
Example: SPLT-1.2K-LM24-4X160W-24V-1600AH-2XPTZ-NVR-W4G-BC-R2-PCBL

Mast Finish	
POWDER COATED BLUE	-PCBL
POWDER COATED BLACK	-PCBK
GALVANIZED	-GAL

Links (Click on the below items to view):

- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/336505.JPG)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
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