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SPLT-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3

45' Portable Solar Security Tower - 7.5' Trailer - (4) LED Lights (2) LED Strobes (2) IP Cameras, 2TB NVR - Router/4G Hotspot - Backup Gas Gen - NDAA

Product ID: 279391

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-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3 Trailer Mounted Solar Security Mast

Mast Specs

Tower Length: Telescoping from 45'
Stages: 5
Mast Head Length: 44"
Materials: Steel
Finish: Powder Coated - Gloss Blue
Operation: Electric Winch
Mast Cable: -

Solar Specs

Panels: (2) 300 Watt panels
Method of Deployment: Fixed Mount
System Voltage: 12 Volts
Solar Charge Controller: 40A MPPT
Battery Bank: (6) 40aH Lithium-ion Batteries
Battery Capacity: 240aH Total / 240aH Usable
Battery Charger: 120V
Inverter: NA
System Runtime: -

Gas Generator Specs

Quick Summary

National Defense Authorization Act (NDAA) Compliant
45' Solar Light Tower
Steel Construction
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Electric Winch Operation
(2) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
120V Battery Charger
Foldable Tongue
2 TB NVR
GPS Tracking
Collapsed Mast Clears Standard Bridges

Unit Type: Gas-powered Generator

Engine: 420CC 15 HP OHV

Rated Power: 7,000W output, 9,000W peak

Fuel Capacity: 6.5 gallons

Voltage: 120V 20A, 120/240V 30A, 120V 30A, 12V DC

Starting System: Recoil & Electric

Autostart: When Battery Bank Reaches Below 30% Capacity

IP Camera Specs
Camera Qty: (2)
Camera Type: Security Cameras
Camera Dimensions: 14.38" H x 7.12" D
Camera Weight: 9 lbs
Total Watts: 51 (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: 20x
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

LED Light Specs
Lamp Qty: (4)
Lamp Type: CREE LED
Single-lamp Dimensions: W-9" D-3.25" H-6.5"
Voltage: 11-25 Volts AC/DC
Total Watts: 240W
Single-lamp Watts: 60W
Total Lumens: 21,600 lms
Single-lamp Lumens: 5,400 lms
Luminous Efficacy: 90 lm/w
LED Life Expectancy: 50,000+ hours
Color Temp: 5600K, 4000K or 3000K
Color Rendering Index: 80
Beam Angle: 60° Vertical, 75° Horizontal
Lighting Configuration: Flood Beam
Sensor: Day/Night w/ Manual Override
Ambient Temp Range: -50°C to +70°
Housing Material: Cast Aluminum
Lens Material: Polycarbonate
Mounting: Tower

LED Strobing Beacon Specs
Lamp Type: LED
Dimensions: 4.7"-Diameter 2.1" Height
Lamp Weight: 1 lb
Wattage: 10.2
Lumens: 1,020
Luminous Efficiency: 100 Lumens per Watt
Lighting Configuration: Strobing Flash
Flash Rate: 1.82 Hz
Voltage: 12-48 V DC

Network Video Recorder Specs

Storage Capacity: 2 TB SATA Hard Drive
Channels: 8
Camera Resolution Support: Up to 8 MP
Installation Type: Plug and Play
Incoming/Outgoing Bit Rate: : 40 Mbps/80 Mbps
Frame Rate (fps): 60 fps per Channel
Recording Modes: Continuous, Schedule, Event, Motion Detection and VCA
Export Format: MP4
Video Outputs: (1) RCA, (1) VGA, (1) HDMI, (1) USB 2.0 (Front), (1) USB 3.0 (Rear)
PoE: = 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
Materials: Aluminum

Router/Antenna 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
SIM Slots: (2)
Cellular and GPS Antenna Connector: (2) SMA Antenna Connectors, (1) SMA GPS Antenna Connector, (2) Wi-Fi Connector
Power Input: DC Jack/Terminal Block: 10V – 30V DC
Power Consumption: 16W (Max)
Antenna: 6dbi (Not Included)

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 Crack Leveling Jacks

Wheels: (2) 15" 5x4.5 Steel Rims

Tires: ST205/75/D15 H188

Hitch: 2" Ball Coupler

Transport Dimensions: 160.68"-L x 88"-W x 81.15"-H
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-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3 Portable Security Tower provides a safe and effective way for operators to monitor locations from elevated positions up to 45`. This solar security assembly features a telescoping tower with a removable mast head for storage when not in use. Two NDAA compliant bullet security cameras can be used to record images, which is supported by a

2TB NVR. Equipped with four LED lights, two security LED strobe lights, and GPS tracking, an included router facilitates wireless access point and cell network connections. This unit features two 300-watt solar panels (fixed mount), a 120V battery charger and a 240aH capacity lithium-ion battery bank.

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

The SPLT-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3 is a complete, portable solar-powered security system for outdoor and remote locations. This unit consists of a 45` telescoping mast, two 300-watt solar panels, two outdoor cameras, four LED lights, wireless router, GPS tracking, lithium-ion battery bank, backup gasoline generator, battery charger and solar charge MPPT controller. All components are mounted on a single-axle trailer. This system does not come with monitoring plans.

All cameras on this system comply with the 2019 National Defense Authorization Act (NDAA). The regulation bans federal governments, their contractors and businesses with national security interests from buying and using surveillance equipment made by specific major China-based manufacturers, including Hikvision, Dahua and their OEMs. Security products sold by Honeywell, Bosch, Panasonic, ADT, Flir and many more are affected by the ban. NDAA compliance also includes a ban on ZTE, Huawei and Hytera telecommunication equipment.

Operation:

- (2) 300W solar panels w/ solar MPPT charge controller
- (6) 40aH lithium-ion batteries - 240aH total battery bank/240aH usable
- (2) bullet cameras
- 2TB network video recorder
- Router - wireless access point or cell network
- 120V battery charger
- Backup gasoline generator
- All system components secured to a DOT-approved trailer
- Trailer comes with (4) leveling jacks and vin#

Network Cameras: The security cameras provide operators with crisp, 1080p full-HD high resolution images. A 4.7-94mm varifocal lens automatically adjusts focus, providing operators with precise 20x optical zoom levels. Integrated long-range IR LEDs, with a wavelength measurement of 850 nm, enable the day/night cameras to see distances up to 492` under nighttime conditions. The units offload videos in MP4 format and features H.264 and MJPEG video compression. The PTZ cameras each measure a compact 14.38" x 7.12".

The cutting-edge security devices are designed to perform in outdoor locations and rainy conditions. The IP66-rated units resist the negative effects of non-corrosive liquids. De-fogging features enable the units to operate in rainy and foggy conditions. The devices are capable of operating in temperatures between -22°F and 149°F.

Network Video Recorder: The solar security assembly comes with a 2TB, 8-channel network video recorder. Installation 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), 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.

LED Lights: The system contains four, 60-watt LED lights for illuminating outdoor locations. Each unit produces 5,400 lumens of output, with a combined total of

21,600 lumens. The light assemblies consist of six LEDs paired with high purity specular optics to produce a wide light distribution overpowering that of a 500 watt quartz flood lights. This light is constructed of three angled boards that helps provide a wider spread. Instead of the light only shining forward, the center board is concentrated to go straight out while the boards on the side are 45° offset. The LED lights are designed to withstand demanding conditions and is waterproof, vapor proof and built to resist the damaging effects of an outdoor environment. All LED lights are housed within a waterproof aluminum housing that is powder coated for added durability and resistance to corrosion. The housing incorporates integral cooling fins for efficient heat dissipation and increased LED longevity. The LED lamp assembly is protected by a shatterproof polycarbonate lens which is secured to the housing with a waterproof seal. A 1/2" waterproof connector provides a secure and sealed power connection point and rounds out this unit`s weather resistant construction. An optional glare shield it shipped with this light. Accessible day/night sensors enable automated functionality, allowing the lights to turn on automatically at night and off during the day. A manual override switch can be used to bypass the photocell sensors and turn the units on/off as needed.
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). The access point can be disabled for security purposes upon request. Customers must provide a 6dbi antenna for the system (not included).
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-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3 comes with a pair of security LED strobe lights; one blue and one red. These compact, Generation 3 LED beacons contain an LED lamp assembly that produces 360° of brilliant light without the dark spots or unevenness of traditional incandescent beacon lights. The colors of this unit are produced by color specific LEDs rather than a colored lens. This increases the effectiveness and reliability of the unit as there is no chance of lens discoloration and no loss of output due to lens dissipation.



Click Photo to Enlarge

Light 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 45` for effective coverage. This light boom can be extended to 45 feet for maximum area coverage and collapsed for applications where a smaller footprint is required. In a collapsed position, the tower is towable on roads and is capable of clearing standard bridges. The mast extends to its full height using an included electric 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. The LM series of towers are powder coated with glossy blue finish 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 lb 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.



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. 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 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: This system comes with a 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 come with an inverter. We can add an inverter to power additional equipment from the solar tower at an additional cost.

Backup Gas Generator: A backup gas-powered generator is available on the system, which automatically starts when battery voltage drops below acceptable levels. Powered by a 4-stroke OHV single cylinder engine with a forced air cooling system, this unit features a variety of receptacles, including four 120 V 20A three-prong receptacles, one 120/240V 30A twist-lock (L14-30), and one 120 V 30A twist lock, as well as one 12V DC cigarette lighter style car-charger outlet.
We offer models with LPG/LNG or diesel backup gensets (may come with additional costs). An autostart feature automatically activates the backup generator when the battery bank reaches below 30% capacity. 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 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, 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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Product ID: 279391

Export Control Classification Number (ECCN): EAR99

Options:

SPLT-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3-Color Temp

Example: SPLT-.53K-LM45-ISGG-ACC-TLR7-2XPTZ-20X-2TB-W4G-M3-56K

Color Temp	
5600K	-56K
4000K	-40K
3000K	-30K

Links (Click on the below items to view):

- **Catalog Page - Product Series**
- **Operations Manual**
- **HigResPic1**
- **Video1**
- **Video2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**