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SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G

40' Portable Solar Security Tower - (2) Solar Panels, 6 kW Diesel Gen - (4) LED Lamps, (4) Cameras, 2TB NVR, Router/WAP

Product ID: 321737

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-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G Telescoping Mobile Security Tower

Mast Specs:

Mast Type: Manual Crank-Up
Boom Height: Up to 40`
Materials: Galvanized Steel
Operation: Manual Hand Crank Winch
Winch: 2500lb, Self-Braking
Stages: Five

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: 120 V
Inverter: NA
System Runtime: -

Genset Specs:

Engine: Kubota D1105-BG-ET01
Engine Type: Vertical, liquid-cooled, 4-cycle diesel engine
Engine Speed: 1800 RPM
No. of Cylinders: 3
Generator: Marathon Pancake 6KW 4-Pole Brushless
Voltage: 120/240V Single Phase
Battery: 12V
Fuel Cell Capacity: 30 Gallons
Fuel Delivery: Electric
Noise Level: Db level 63 @ 23 ft
Breakers: (1) 30A 3P [120/240V], (1) 20A 1P [120V]
Receptacles: (1) L14-40R [120/240V], (1) 5-20R Duplex [120V]

Mast Specs:

Features/Specifications

40' Mast
Powder Coated Finish
Removable Mast Head
125 mph Wind Resistance
Manual Winch Operation
(2) 300 Watt Solar Panels
Fully Solar, No Fuel Needed
120 V Battery Charger
6KW Kubota Brushless Genset
30 Gallon Fuel Cell
External Grounding
Low Oil, High Engine Temp Auto Shut-Off
Hour Meter - Alternator Warning
Withstands 50Mph Winds at Full Extension
IP66 Camera
492` IR Recording Distance
2TB NVR
Unlocked Professional Grade Router
Extended Coverage via External Antenna
Weatherproof Coiled Cable
Padlocks for Security
Metal Trailer Enclosure

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Security Camera Specs:
Camera Type: Security Camera
Dimensions:14.38" H x 7.12" D
Connectors:1.0Vp-p, 75 Ohm, BNC
Effective Pixels:2.1 MP, 1920 x 1080 Resolution
Power Supply: 24V AC (PoE - 802.3at)
Sensor: CMOS
Viewing Angle: 58.3° (Wide) - 3.2° (Tele)
Connectivity: IP/Network Wired
Infrared Range/Wavelength: 492`/850 nm
Minimum Illumination: 0.02 Lux @ F1.6 AGC On, 0 Lux w/ IR
Electronic Shutter: 1 ~ 1/10,000s
Lens: 4.7-94mm Varifocal Lens
Optical Zoom: 20x
Day/Night: ICR
Video Framerate: 1080p @ 30fps
Video Offload: MP4
Support: ONVIF Profile S, H.265 Codec
Ambient Temp Range: -22°F to 149°F
Video Output: (1) BNC
Housing: Aluminum
Lens: Polycarbonate

Video Recorder Specs:
Video Recorder Type: 3300 Series 8-Channel Network Video Recorder
Storage Capacity: 2 TB SATA Hard Drive
Camera Resolution Support: Up to 8MP
Installation Type: Plug and Play
Incoming/Outgoing Bit Rate: 40Mbps/80Mbps
FPS: 60fps Per Channel
Compression Format: H.265, H.264, H.264 OVC
Recording Modes: Schedule, Continuous, Motion Detection, VCA and Event
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 ~ 240 VAC
Housing: Aluminum
Operating Temp: 14°F ~ 131°F
Dimensions: 15” W × 11.4” D × 1.8” H
Weight: 6.6 lbs

Router/Antenna Specs:
Wireless Access Point: Included
Router Type: Pepwave Surf SOHO Router
Carrier: Unlocked - Supports GSM, CDMA and LTE; Works on All Major Carrier Providers
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`

LED Light Specs:
Lamp Type: CREE LED
Dimensions: 12.60"-L x 9.77"-W x 5.07"-D
Weight: 13.3 Lbs
Total Watts: 600W (150W Per Lamp)
Total Lumens: 81,000 Lm (20,250 Per Lamp)
Luminous Efficiency: 135 lm/w
Beam Configurations: 10° Spot, 24° Wide Spot, 38° Narrow Flood, 60° Flood, or 90° Wide Flood
LED Color Temperature: 6000k
LED Life Expectancy: 80,000 hours
Optics Efficiency: 98% - PMMA High Transmittance Optics
Led Drive %: 90%
Voltage: 120-277 VAC
Amp Draw: 1.25A @ 120V, 0.625A @ 240V, 0.54A @ 277V
Wiring: 2.5` Pigtail w/ Flying Leads
Materials: Die Cast Aluminum Housing, PMMA Optics
Ambient Temperature Range: -40°C to +80°C
Waterproof Rating: IP67

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
Transport Dimensions: 160.68"-L x 88"-W x 81.15"-H
Weight: +-1200 lb
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
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Made in Texas

The Larson Electronics SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G Portable Solar Security Tower provides a safe and effective way for operators to monitor locations from elevated positions up to 40'. This solar security assembly features a telescoping tower with a removable mast head for storage when not in use. Four security cameras can be used to record images, which is supported by a 2TB NVR. Equipped with four LED 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.

The SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G is a complete, portable solar-powered security system for outdoor and remote locations. This unit consists of a 40' telescoping mast, two 300-watt solar panels, four 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.

Cameras: The SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G features four IP security monitoring devices providing operators with crisp 1080p full-HD high resolution images. Each camera includes a 4.7-94mm varifocal lens that 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. This units offload videos in MP4 format and feature H.264 and MJPEG video compression. The devices support ONVIF Profile S and H.265 codec. These IP security cameras are designed to perform in outdoor locations and rainy conditions with the addition of de-fogging features. This IP66-rated units resists the negative effects of non-corrosive liquids and capable of operating in temperatures between -22°F and 149°F.

NVR/Router: For video recording, the tower comes with one NVR, mounted at the base of the unit. This component is locked to prevent tampering or theft. The 8-Channel NVR supports 2TB of storage and 40/80 Mbps incoming/outgoing bit rate at up to 60fps per channel. To maximize storage, the unit supports H.265, H.264, and H.264 OVC video compression. This unit features four recording modes (Schedule, Continuous, Motion Detection and Event) with MP4 video offload format. One RCA input and four output (VGA, HDMI, USB 2.0 and USB 3.0) slots can be found on the NVR. 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.

Note: Reviewing footage must be done by connecting a monitor and mouse to the unit (supplied separately).

Wireless Capability: Operators can connect to all major carrier providers via an unlocked wireless professional-grade router, which is capable of supporting GSM, CDMA and LTE. The unit features 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. An included wireless access generates a local Wi-Fi network for nearby individuals to connect their devices to.

Lights: The SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G includes four GAU-LTL-150W-LED LED lights offering intense light output. These LED lamps produce 86,400 lumens total with a 6 amp draw at 120V, and feature an 80,000 hour service life with 120-277 volt compatibility, and a IP67 waterproof rating, making them a rugged and powerful LED alternative to metal halide lamps. Each 150 watt lamp is designed with Sixteen CREE

high output LEDs arranged in rows, paired with PMMA high purity optics to produce a well focused 24° wide spot beam that is ideal for providing far reaching concentrated illumination while still covering a substantial amount of area. We also offer optional optics with 10° spot, 38° narrow flood, 60° flood, and 90° wide flood beam spreads. The flood beams are designed to provide more light over a larger area nearer the fixture, making flood versions ideal for use as dedicated work and area lights. These LED lights offer low power requirements, high durability and a versatile mounting system that makes these LED light emitters a superior lighting solution for demanding applications where power and reliability is critical.

Heat Management: Heat is the single largest factor in premature LED failure and color shifting. These LED units feature individual heat sinks per bank of six LEDs to control heat buildup rather than utilizing a single housing to dissipate heat. This allows for more thorough cooling of the LEDs for extended operating periods. This allows the LEDs to be driven at up to 90% capacity without overheating or visible loss of light output. The end result is more light with less heat and longer LED life with an average 70% lumen maintenance after 80,000 hours.

Durability: As well as unparalleled heat control, the GAU-LTL-150W-LED series of LED lights from Larson Electronics also offer IP67 rated construction that is designed to withstand extremes of environmental and operating conditions. These units can withstand rapid temperature changes of -40° Celsius to +80° Celsius, are waterproof, and resist ingress of dust, dirt and humidity. The housings are formed from die cast aluminum and the optics are high transmission PMMA with 98% light transmittance. The CREE LEDs help these units achieve resistance to vibrations and are rated at 70% lumen maintenance after 80,000 hours of use. We recommend these LED lights for use in applications where a lot of vibration, dust, dirt, dampness and abusive working conditions are encountered.

Telescoping Boom: The telescoping boom consists of five sections extending up to 40 feet through the use of a manual self braking winch and allows for rotating the cameras 360 degrees. The telescoping boom is constructed of galvanized steel to resist rusting and corrosion and is capable of withstanding 50 mph winds when extended to its full height and with the stabilizing leveling jacks deployed.



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).

Generator: The SPLT-.6K-240AH-6K-4X2MP-PTZ-4X150LTL-LED-2TB-AP-W4G mobile light tower incorporates a long list of impressive features. The diesel engine is a water cooled Kubota that operates at 1800 rpm. This engine features key operated electric starting, a full twelve volt electrical system, automatic low oil pressure and high temperature safety shutoffs, dual fuel filters and easy access oil and radiator drain ports to facilitate maintenance. A 30 gallon fuel tank allows the engine to operate for 120+ hours continuously without refueling. The 6,000 watt generator is a single bearing design and produces 120/240 volt current at 60 Hz. The generator uses a four wire hookup system with an external ground allowing for setting up both electrical and mechanical safe grounding systems.

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 lb 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: Security, monitoring, outdoor surveillance, covert operations, concerts, large events, law enforcement, military, perimeter security, commercial safety, industrial facilities 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

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Video1**(https://www.youtube.com/watch?v=Xwe6r4Bawpw)
- **Video2**(https://www.youtube.com/watch?v=hAc6AVhOvqI)
- **Video3**(https://www.youtube.com/watch?v=dzM8vFF-Oc4)
- **Video4**(https://www.youtube.com/watch?v=1VsIFwQwhZM)
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