



Surveillance Towers & Equipment

Surveillance Towers & Equipment



Larson Electronics surveillance towers and equipment provides reliable monitoring in outdoor and remote locations. These products feature elevated cameras and supporting equipment, powered by generators, solar panels or a temporary power source. With 24/7 monitoring capabilities, the custom surveillance towers are designed for commercial parking lots, construction sites, public locations, businesses, schools, concerts, roadways, large events, security checkpoints, border patrol and more. The surveillance systems can be used for security applications, deterring theft, vandalism and other criminal activities, as well as for meeting insurance requirements for businesses.

These custom monitoring solutions are less costly and more thorough, compared to paying for traditional manpower surveillance via security guards. Unaffected by rough weather or human error-related



factors, security footage generated by surveillance towers are reliable and comprehensive.

This catalog includes the following types of custom surveillance towers and kits:

Solar Towers: Solar security towers are powered by solar panels for sustainable, quiet operation. Batteries enable cameras and other equipment to operate at night or in low-light conditions. Solar surveillance towers are available as stationary units, job box mounted or trailer mounted. Models with a backup generator serve as a secondary power source when batteries are depleted and conditions are unsuitable for solar power generation.

Generator Towers: Generator security towers utilize a gas, diesel, LNG or propane generator as a power source for cameras



and supporting equipment. These products are offered as stationary units or trailer mounted.

Surveillance Towers: Surveillance camera towers do not come with a power source. Available in AC or DC configurations, the systems must be powered by customers using a temporary power source. These products are available as stationary units, trailer hitch mounted, truck bed mounted, job box mounted or trailer mounted.

Surveillance Kits: Surveillance security kits consist of monitoring systems ready for installation on wall or surfaces. Available with wall or pole mount features, the products are ideal for use on remote buildings, structures or areas. These kits can be combined with a solar panel and charge controller for solar operation or plugged into a preferred power source.

Surveillance Towers & Equipment



Numerous camera types and configurations are available for all surveillance towers, including bullet cameras with digital zoom, bullet cameras with optical and digital zoom, PTZ cameras, fisheye cameras and thermal cameras. All cameras have NDAA-compliant options to meet security requirements.

Supporting surveillance equipment can be added to these monitoring systems to extend their functionality. Adding recording devices enable saving footage for logs or playback (systems that work with ONIF-compliant recording devices are available). For wireless access, an LTE router with a customer-provided SIM card facilitates remote monitoring or recording. Wi-Fi connectivity options include the ability to connect to existing Wi-Fi networks or create a Wi-Fi network. Models that generate wireless access points for wireless daisy-chain configurations with multiple units are also available.



Supplemental lighting for wide-area illumination can be added to the surveillance towers. Options for outdoor lights include visible lights and infrared lights.

Mast height, finish, mount and deployment method are open to customization. Tower deployment methods include manual crank (hand winch) or electric winch operation. Truck-mount models vary, such as masts that attach to the trailer hitch and towers with vertical surface mounts that secure to a headache rack in a truck or the exterior door or wall of vans. Fixed mount or fold over models that attach to existing 5th wheel trailer mounting brackets or temporary poles for supporting the mast using the tire of a vehicle can also be ordered.

Larson Electronics is a leading manufacturer of surveillance systems, industrial lighting products and power distribution equipment. The company's surveillance towers and equipment in this catalog are



open to customization to meet the monitoring or project requirements of businesses or the desired area.

Solar Surveillance Towers



Larson Electronics solar surveillance towers are remote monitoring solutions powered by solar energy. The low-noise systems are equipped with solar panels and batteries, which supports cameras and other electrical components. A backup generator can be added for supplementary power at night or when outdoor conditions are unsuitable for solar charging.

These solar camera towers are ideal for locations requiring security but have limited access to power, including parking lots, construction sites, roadway projects, outdoor events and public areas. Compared to manpower surveillance via security guards, the solar monitoring solutions are less costly to implement, more accurate and consistent, easily scalable and highly reliable in outdoor environments.

The solar surveillance towers in this catalog include stationary, job box mounted and trailer mounted systems. Stationary solar towers are designed for permanent installation on flat surfaces or walls. Cameras mounted at the top of the mast ensure complete coverage of the area. Job box mounted solar towers are surveillance solutions with an included job box for adding or installing customer-provided equipment to the system. Trailer mounted solar towers are towable units with all system components accessible on a single-axle trailer. Stabilizing jacks are available for secure deployment.

Generator Surveillance Towers

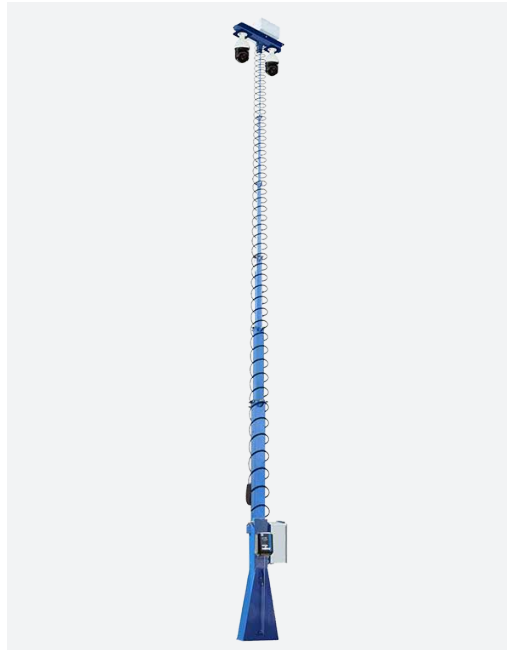


Larson Electronics generator surveillance towers are remote monitoring solutions powered by a portable generator. The versatile systems are equipped with a gas, diesel, LNG or propane generator, which supports cameras and other electrical components. Models with accessible receptacles can power other devices and equipment needed for surveillance operations.

These generator camera towers are ideal for locations requiring security but have limited access to power, including parking lots, construction sites, roadway projects, outdoor events and public areas. Compared to manpower surveillance via security guards, the monitoring solutions are less costly to implement, more accurate and consistent, easily scalable and highly reliable in outdoor environments.

The generator surveillance towers in this catalog include stationary and trailer mounted systems. Stationary tower models are designed for permanent installation on flat surfaces or walls. Cameras mounted at the top of the mast ensure complete coverage of the area. Trailer mounted towers are towable units with all system components accessible on a single-axle trailer. Stabilizing jacks are available for secure deployment.

Surveillance Towers



Larson Electronics surveillance towers are elevated camera monitoring solutions for outdoor locations, public areas and worksites. Standard models do not come with a power source and can be powered with customer-provided equipment or using temporary power at the site. AC or DC configurations are available in this catalog.

These surveillance towers are ideal for outdoor locations requiring long-term or temporary monitoring, including work facilities, buildings, roadway projects, temporary checkpoints, outdoor events, schools, parking lots and more. Compared to manpower surveillance via security guards, the monitoring solutions are less costly to implement, more accurate and consistent, easily scalable and highly reliable in outdoor environments.

The surveillance towers in this catalog are available as stationary masts, trailer hitch mounted, truck bed mounted, job box mounted or trailer mounted. Stationary masts are designed for permanent mounting on flat surfaces or walls, serving as a long-term monitoring solution. Job box mounted surveillance towers come with a heavy-duty job box, allowing customers to add devices or equipment to the system.

Trailer hitch mounted models are deployed on the back of vehicles for temporary surveillance in outdoor locations. Truck mounted camera towers are secured to a headache rack in trucks, exterior doors or bodies or tires for convenient, wide-area coverage of the location. Trailer mounted surveillance towers incorporate all system components on a single-axle trailer for temporary monitoring and deployment.

Surveillance Towers and Equipment- Buyer's Guide

Larson Electronics surveillance towers can be configured to meet specific operating requirements. Customization involves choosing various system components and features that enhance the monitoring capabilities of the business, project or operations. The configuration of the surveillance tower directly influences the number of operational days without sun.

Options for configuring surveillance tower features are available below.

Mast

The mast is a foundational component on surveillance towers, raising equipment to desired heights for wide-area coverage. Consider that trees, tall obstructions and large structures in the surrounding area that block the “view” of cameras at the top of the mast can reduce the effectiveness of surveillance towers. To avoid such scenarios, choose a mast height that can clear most obstructions or structures in the area.

Options for masts include fixed mount and fold over. Fixed mount masts are standard and do not fold over. Fold over masts can be folded during storage or when not in use. Mast deployment options for raising and lowering the tower include manual winch (hand crank) and electric winch.

Mounting customer-provided equipment to the top of the mast should be taken into consideration (if this is a preference), as it can change the required payload capacity of the mast. In addition to weight, the dimensions should also be factored in for a proper build.

Cameras and Recording

The type and number of cameras can be customized to meet various surveillance requirements. A standard configuration for surveillance towers incorporates 2-4+ cameras. Options for cameras include PTZ, fixed bullet directional and fixed 360° omni-directional. NDAA compliant cameras are available to meet security requirements.

A camera recording device is required to save footage during surveillance for creating logs or playback at a later time. The size of the hard drive can be customized, with standard systems using 2-8 TB.

Connectivity and Tracking

Connectivity refers to remote access for the surveillance tower. A cellular service rental plan can be added or provided by the customer. For cellular service with failover switching, a dual sim card can be added. Customers can send the sim card to Larson Electronics for configuration prior to shipment, if needed.

Adding a router enables the system to generate its own wireless network or connect to a network in the surrounding area. It is also possible for systems to serve as a repeater for local networks, extending the network signal (if needed).

GPS tracking options allow customers to know the location of the surveillance tower at all times for security.

Surveillance Towers and Equipment- Buyer's Guide

Outdoor Lights

Lights provide elevated illumination and security for the area. Lamps can also enhance the footage taken by the cameras at night. A total of 2-6 LED lights (infrared and special colors are available) can be added to surveillance towers. Metal halide and high pressure sodium lights are also available. Choose from a wide range of spot and flood beam angles to match specific light distribution requirements.

Automated functionality can be added to the lights, which activates and deactivates the fixtures based on specific conditions. Adding a timer enables scheduling. A dusk-to-dawn (day/night) sensor automatically turns on the lights at night and turns them off during the day. A motion sensor activates the lights upon sensing movement in the surrounding area and turns off the lights after a set period.

Strobe Light

Strobe lights serve as deterrents for the system. Typically blue, red, orange or white (combination of colors is available), the operation of the strobe can be customized. Options for strobe operation include always on, night only or motion sensing. A standard surveillance tower uses one strobe light; it is possible to add more if required.

PA System and Alarm

PA systems add audio functionality to the surveillance towers, allowing one-way or two-way communication during use. An audible warning alarm can also be added to the system, configured to continuously play on schedule, automatically when motion is detected or manually when triggered from a remote source. The warning alarm can be a standard warning tone or a recorded message.

Solar Power

For solar surveillance towers, several solar panel related components can be customized. The type, capacity and deployment method are the features open for customization. A standard solar surveillance tower has two, 300-watt solar panels on a fixed angled frame. Models with more than four solar panels may use a slider for deployment, depending on the size of the frame and trailer.

Wind Generator

A wind generator can be added to the surveillance system for generating additional power. Wind turbines are secured on masts for exposure to wind.

Surveillance Towers and Equipment- Buyer's Guide

Battery Bank

Batteries save energy harvested by solar panels and/or wind generators, powering the system at night or in low-light conditions. Larson Electronics surveillance towers use lithium-iron phosphate (LFP) batteries in place of liquid batteries. LFP batteries are 100% usable, reducing the number of batteries required to support the system. Available options for battery voltage include 12V (standard), 24V and 48V.

Backup Fuel Generator

Backup fuel generators provide supplementary power to the surveillance tower system. Options for the type of backup generator include diesel, gasoline and LPG/LNG. All backup generators feature auto-start functionality with the battery charger plugged into the generator by default (for systems with a battery charger).

Additional Power and Grid-tie Failover

Customer-provided equipment can be powered by the surveillance tower, if needed. To factor in this feature, it is important to know the voltage and wattage of the customer-provided equipment to ensure compatibility and runtime. Receptacles can be added to accommodate power connections between customer-provided equipment and the surveillance tower.

Grid-tie failover functionality can be added, which is facilitated by a transfer switch. The default configuration prioritizes grid power first, switching over to a backup generator when grid power is unavailable.

Remote Health Monitoring

Surveillance towers have numerous components that must be monitored to ensure uptime. Customers can opt to add remote health monitoring for streamlined monitoring of internal systems from an off-site location. Internal systems included in the remote health monitoring package are error codes, system checks, battery capacity level, fuel level, charge controller voltage and more.

Equipment Storage

For trailer mounted surveillance towers, additional onboard storage can be added for customer-provided equipment. This may come in the form of a NEMA-rated, lockable job box or additional space on the trailer.

Solar Questionnaire

Do you need area lighting?Yes ☐ No ☐**Type of Lights:**LED Lamps Metal Halide High Pressure Sodium
Infrared LED Special: _____**Lighting Requirements (populate as much as possible):**

Fixture Qty: _____ Lumens: _____ Coverage Area: _____

Area Lighting Operation:

Timer (Scheduled) Dusk-to-Dawn (Day/Night) Motion Sensor Manual On/Off

Do you need PA system (for remote communications over speaker)?**1-Way PA systems allow for live talking through speaker, no audio from system back to you.****2-Way PA system allows for live talking through speaker AND receiving audio back from unit.**Yes, 1-Way PA ☐ Yes, 2-Way ☐ No ☐**Do you need an audible warning alarm?**Yes ☐ No ☐**Type of audible alarm?**Alarm Tone ☐ Pre-recorded audio message ☐**How should the audible alarm be triggered?**On schedule ☐ When motion is detected ☐ Manually triggered remotely ☐**Do you need cameras on the unit?**Yes ☐ No ☐**Type and Quantity of Cameras?**

Fixed Bullet Camera w/ Digital Zoom Qty: _____ Fixed Bullet Camera w/ Optical Zoom Qty: _____

Fixed Omni-Directional Camera w/ Digital Zoom Qty: _____

Fixed 360° Fisheye (Digital PTZ) Camera w/ Digital Zoom Qty: _____

Pan-Tilt-Zoom (PTZ) Camera w/ Optical Zoom Qty: _____

Do you need ability for remote viewing via cellular service?Yes ☐ No ☐**Do you need cellular service rental plan included, or will you provide your own service?**Yes ☐ I have my own service ☐**Do you need dual sim card functionality for cellular service with failover switching?**Yes ☐ No ☐**Do you have capabilities to configure the SIM card, or will you be sending us the SIM card prior to shipment?**Yes ☐ I will ship you my sim card ☐**Do you need GPS tracking of the unit?**Yes ☐ No ☐

Solar Questionnaire

Do you need this unit to generate its own wireless network? (Creates a Wi-Fi network you can connect to from close proximity – requires being physically close to the unit)

Yes ☐ No ☐

Do you need this unit to act as a repeater for local networks? (Connects to existing Wi-Fi network and expands signal to other nearby equipment, including on-board equipment)

Yes ☐ No ☐

Do you need a strobe light?

Yes ☐ No ☐

What color of strobe light?

Red ☐ Amber ☐ Blue ☐ Green ☐ White ☐
Red & Blue ☐ Red & White ☐ Blue & White ☐ Amber & White ☐

How should the strobe light be configured?

Constantly On (24/7) ☐ Dusk-to-Dawn (Day/Night) Sensor ☐ Motion Sensor Triggered ☐

What is the required height of mast?:

Extended: _____ Collapsed: _____

What style of masts is required? (Fixed mount is standard)

Fixed mount mast (non folder over) ☐ Fold over mast ☐ Manual push up mast ☐

Do you want manual mast or electric mast for raising/lowering?

Manual Operation ☐ Electric Operation ☐

Are you mounting other equipment to the top of the mast?

Yes ☐ No ☐

If yes, what is the weight and dimensions of your equipment mounted to top of mast?

Weight: _____

Dimensions: _____

Do you have preference on solar panel capacity? Our standard is (2) 300-Watt panels. If you have no preference or requirements for your application, our engineering team will size the solar panels based on the electrical demand of your application.

No preference ☐ Yes, I need: _____

Do you want a wind generator in addition to solar?

Yes ☐ No ☐

Do you have a desired battery capacity? We use lithium iron phosphate battery banks in place of liquid batteries. The battery capacity is 100% usable so half the standard capacity is needed.

No preference ☐ Yes, I need: _____

Do you have a preference of battery bank voltage? Our standard is 12V DC. We can provide 24V and 48V.

12V ☐ 24V ☐ 48V ☐ Other: _____

Solar Questionnaire

Do you have a desired amount of days for the system to operate without sun? Our standard is 1 day operation without sun

Yes, ____ days without sun No []

Do you need additional onboard storage on the trailer deck?

Yes [] No []

If Yes, please explain: _____

Battery chargers are included standard. Do you want 120V or 240V battery charger?

120V [] 240V []

Do you want a backup generator? We offer diesel, gasoline, and LPG/LNG.

All generators come with auto start function and battery charger is plugged into generator by default.

None [] Diesel [] Gasoline [] Liquified Natural Gas [] Propane [] JP8 Jet fuels []

Do you need additional power to power other equipment?

Yes [] No []

If Yes, please explain: _____

If yes, what voltage and what is the total wattage of the equipment you're powering?

Voltage: _____

Wattage: _____

Do you need additional receptacles to power this equipment?

Yes [] No []

If Yes, please explain: _____

Do you want grid-tie failover in addition to generator? This feature provides a transfer switch to attempt charging batteries. By default it will use grid tie first, if available. if not available, it will change over to generator.

Yes [] No []

Do you need a remote health monitoring system to monitor all internal systems from off site location? (error codes, systems checks, battery capacity level, fuel level, charge controller voltage, etc).

Yes [] No []

If Yes, please explain: _____

Do you have any other requirements not covered above?

If yes, please explain below:

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