





What is a Solar Surveillance Trailer?

If you have recently passed by a construction jobsite, a Walmart parking lot, or a vacant property, the chances are you have seen a solar surveillance trailer and wondered what it is, what it does, and how it works.

Through our years within the industry, we've built extensive knowledge around the successful security measures businesses can deploy to protect their sites against crime, intrusion and other security risks.

Mobile solar surveillance trailers are considered one of the most effective forms of security solutions, and in this article, we're going to explore what they are, key features, and answer some frequently asked questions around them.





What Are Mobile Solar Surveillance Trailers?

Solar surveillance trailers are a type of mobile video surveillance unit specifically designed for rapid deployment at locations that require temporary security coverage but lack the power and/or internet facilities to support a traditional security camera installation.

Equipped with solar panels that power internal batteries, and with security cameras that sit on top of a tall mast, they give users wideranging views of their site.

Depending on the manufacturer, there are a range of additional security devices to help prevent crime such as:







Sirens



Alarms



Lights



Security guards are a commonly considered solution for security at parking lots, construction jobsites, critical infrastructure, and vacant properties. Although guards still remain popular, they are no longer the sole option for business security. But, why are surveillance trailers starting to replace security guards? Well, there are several benefits of using surveillance trailers, which include:

- 1 Cost-Efficiency
- 2 Reliability
- 3 Effectiveness
- 4 Proactiveness
- 5 Documentation







Cost-Efficiency

Hiring a security guard has always come at a premium rate, and with labor shortages driving wage increases, these costs are only spiraling higher than ever before. The cost of hiring a surveillance trailer is significantly less than hiring a security guard. In fact, by using WCCTV's Surveillance Trailers, you can reduce security cost by up to 88% by switching from traditional methods.



Reliability

A solar surveillance trailer isn't going to be late for work, take a day out sick, fall asleep on duty, or turn a blind eye. Surveillance trailers are always awake and on guard. Providing 24/7 visibility through 4G/5G connection and solar powered batteries, meaning there's reduced risk of operational disruption, which can be caused from being connected to mains power and fixed internet.





Effectiveness

A surveillance trailer delivers capabilities a security guard simply can't match. With infrared cameras, it provides clear video monitoring up to 200 metres even in complete darkness, dust, or harsh weather. Unlike a guard who can only be in one place at a time, often leaving costly blind spots on large sites, a solar-powered surveillance trailer offers full area coverage at a fraction of the cost of hiring multiple guards.



Proactiveness

Many companies rely on guards believing they can stop crime, but a solar surveillance trailer with remote monitoring can do the same, often more proactively. When intruders are detected, a remote operator verifies the threat and triggers deterrents like audio warnings, sirens, lights, or police dispatch in real time.





Documentation

Solar surveillance trailers don't just provide live video, they also store every incident, giving you a full archive of indisputable evidence for law enforcement, insurers, and clients. Unlike manned guarding, they never call in sick, never take breaks, deter crime, deliver live response, and document all events at a reasonable cost. It's why demand is soaring, with the market for surveillance trailers estimated at \$2.7B in 2024.





What Industries Use Solar Surveillance Trailers?

Below outlines the wide range of industries suited to Solar Surveillance Trailers:

- Police and Law Enforcement
- State, Municipal, and Local Government
- Property Management Companies
- Big Box Retail Parking Lots and Malls
- Surface Lots
- Critical Infrastructure
- Public Works Projects
- Construction Jobsites





How do Solar Surveillance Trailers Work?

Solar surveillance trailers combine video surveillance cameras and remote connectivity technology in a portable unit powered entirely by solar energy. The video feed from the cameras on a surveillance trailer can be accessed remotely via cellular connectivity, meaning users can view real-time or archived footage directly from their phones or laptops.

Alternatively, the video streams can be sent to a remote video monitoring station where security professionals monitor cameras 24/7. For some providers, both options will be included in their service. Trailers can also be fitted with a range of customization options to enhance their security capabilities.





What are the Main Key Features?

Security is a competitive market and with most offering surveillance trailers, there are key features you should be looking for to ensure high-quality security that can protect your site:

HD Security Cameras



Look for cameras with PTZ control, IR night vision, auto-tracking, 1080p HD recording, and edge-based analytics.



Cellular Connectivity



A strong cellular connection is essential. Our built-in 4G/5G tech lets users access their cameras anywhere.





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Tall Trailer Mast



The mast lifts the cameras for clear site coverage. Our trailers reach 20-ft for optimal visibility and monitoring.



Strong Solar Options



Solar panels power the trailer with clean energy. Ensure your system has enough capacity.





What are the Main Key Features?

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Battery Storage



Battery storage keeps trailers running without sun. Ensure good upkeep to avoid downtime.



Complete Mobility



Easy transport allows trailers to be moved to cover blind spots.
Without this, site's risks rise.





How Much Does a Solar Surveillance Trailer Cost?

The cost of a surveillance trailer will vary dramatically by manufacturer, feature set, and build quality. A Google search on surveillance trailer purchase costs will return results ranging from \$13,000 to \$50,000, depending on the country of origin or capabilities.



We suggest always seeking out trailers certified as NDAA-compliant, as cheaper imports often suffer from reliability operations and can be dangerously under-specced.

For industries like construction and other temporary needs, purchasing trailers isn't always the best option. Many manufacturers like ourselves will offer customers the option to rent the equipment. In many cases, this may be a preferable option due to: short-term requirement of security, zero-upfront costs, guarantee of the latest techbology, and an easier procurement process.



Are Solar Surveillance Trailers Monitored?

Depending on the deployment scenario, surveillance trailers can be backed by remote video monitoring services, where a team of security professionals watches the trailer's cameras for criminal activity.









There are several benefits associated with remote video monitoring services, including crime prevention benefits and cost-effectiveness compared to using security guards.

In situations where remote video monitoring is not required, the user can self-monitor solar surveillance trailers via software and/or mobile apps. Most surveillance trailers will also have onboard video storage, which stores all images captured by the cameras 24/7.



How Fast Can a Solar Trailer Be Set Up?

Solar surveillance trailers, in most cases, are quick to deploy.

Operational timescales will often vary more between providers, however, is actually the most important element for your business.

With WCCTV, our Surveillance Trailers can be deployed and operational in up to **20 minutes** for basic setups, providing near-enough immediate coverage.



No waiting days for your cameras to become operational following installation, you can be reassured that with our service, your business is covered from the first day.



Can WCCTV Trailers Work Without Direct Sunlight?

Solar surveillance trailers need sunlight to operate because they rely on solar energy to charge the internal batteries.

Depending on the size, number, and capacity of the internal batteries, solar trailers can operate entirely on battery power in times of zero sunlight.

At WCCTV, our solar surveillance trailer delivers a minimum of 10 days of power autonomy for times of limited direct sunlight. Their innovative design means that our systems do not require a large solar draw to power the system, meaning they provide operational longevity.





Can Monitoring Technology be Integrated?

Advanced security providers normally offer additional integrations or feature add-ons to personalize the surveillance monitoring provided by their solar surveillance trailers.

For construction jobsites, this can include environmental sensors to monitor areas like air quality, weather, and noise. All of which can influence project schedules and are heavily regulated areas which can result in financial penalties and legal action.

Other smart detection integrations like intrusion, PPE, and smoke and fire detection are also available with some surveillance trailer providers, helping to reduce the number of suppliers involved at your site. In turn, minimizing cost and the use of fragmented systems which can create difficulties with compliance





How Can I Get a WCCTV Trailer For My Site?

In most instances, the security provider will transport the surveillance trailers to your site and install them on your behalf.

This removes any complication of organizing transportation and any additional expenditure created through this process.

Always check beforehand that transportation is covered by the provider and there aren't any extra costs that come with them doing this. You may find with some providers that this is a hidden cost.





