

With the advent of high-speed wireless internet and standalone power generation and storage, modern video surveillance platforms can now be used in a wide variety of off-grid applications such as: construction site security, industrial storage facilities or depots in rural areas, remote energy or industrial infrastructure, along with distributed community surveillance where there's no central network or server facilities.

These applications all have a strong need for modern video surveillance platforms, but it's crucial that the right mix of technology and deployment options are carefully selected. This short guide outlines some of the major considerations when evaluating the market and discusses possible approaches.

Top considerations when evaluating off-grid solutions

- ✓ Can I get reliable power and internet?
- What are the "must-have" features I need to enable video surveillance?
- How can I minimize the footprint of my on-premises equipment?
- On multiple users need to access live and stored video?

- Can I select from a wide variety of cameras to suit my needs?
- Are low bandwidth options available?
- Do I need to monitor vehicles or people with Al-based technologies or license plate recognition (LPR).

Options to Address Off-Grid Requirements



Reliable Power and Internet

Probably the biggest upfront question is whether you can access stable power and internet for this type of application. The good news is that high bandwidth wireless internet options are widely available, as are various power generation and storage solutions. There are a variety of vendors who can provide standalone units that address both requirements, including trailer systems and smaller units that can be hung above the area under surveillance. Camcloud's network of integration partners include a variety of vendors who can provide solutions in this area.



Determine the Must-Have Video Surveillance Features

This is the crucial next step. Modern VMS (video management systems) platforms include many features which often come with a price tag, but likely also need to be run on-premises, consuming power and internet you may not have. Core capabilities you would probably want to have are: Live Video Monitoring, 24x7 Video Storage, Playback of Stored Video, and support for Advanced Al. It would also be strongly recommended to consider an Open Platform that has APIs for custom integrations.



Minimize Demands on the Off-Grid Infrastructure

Your solution design should ensure the minimal amount of demands as possible for your off-grid infrastructure. Ideally, this starts with a zero-footprint or "hardware-free" VMS that doesn't require an on-premises server or gateway that will consume physical footprint and power. The obvious answer is to select a 100% cloud option that eliminates the need for this hardware. The benefits are numerous:

- No extra power or physical space required for the VMS system.
- Single video stream leaves the premises, which can then be relayed from the cloud to unlimited number of users to play stored video or access live video streams. This minimizes power and bandwidth usage from the site out to your users.
- High processing requirements like AI can be off-loaded to the cloud, where unlimited compute resources are available.



Future-Proof Your Solution

While the top priority is addressing your immediate requirements, it's important to future-proof the system by giving yourself maximum flexibility. This starts by selecting an Open Platform vendor to avoid vendor lock-in and giving you the ability to work with a large variety of camera brands and 3rd party system such as LPR. If you pick a closed-system vendor, you'll be forced to stick with their software and hardware for the life of your deployment.

Learn More

Whether you are an end user in need of an off-grid solution or an integrator looking to provide advanced solutions to your customers, Camcloud's 100% cloud-based VMS should be on your short-list. With a proven track record of success and a network of partners offering power & internet hardware options, we can help you build a solution that fits your requirements.

"Camcloud doesn't need any device at the customer's premises to work which aligns perfectly with the capabilities of our NOMAD off-grid device, while allowing us to execute our vertical market strategies."

Jason Nagy, J&M Solutions

Off-Grid Video Surveillance Solutions

- Eliminate on-premise hardware or servers
- **⊘** Live vide & 24x7 video recording
- Cloud Al and LPR options
- Partner solutions for power and internet

Contact Camcloud Today

