



# The Ultimate Construction Site Security Camera Feature Guide

From megapixels to real-time notifications, this guide breaks down the most important features to look for in a high-quality site security camera.

The construction industry is heading into its busiest season with high prices and materials shortages looming, causing contractors to double down on their security measures. The warmer months are prime time for thieves looking to make a quick buck, and now that construction prices are skyrocketing, their motivation to steal from construction sites will be higher than ever.

Compared with all other threats, theft is the [number one](#) cause of construction losses each year. When materials are scarce or at a premium, as they are now, the stakes for contractors are even higher.

By deploying a quality site security camera system, contractors can protect their construction sites against theft and increase the recovery rate for stolen materials. Since cameras significantly increase police success in catching criminals, they can be a strong deterrent for thieves.

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## WHEN SITE SECURITY CAMERAS PAY OFF

The unfortunate reality is that theft-related losses are inevitable, but that doesn't mean contractors are powerless to mitigate their risk of losses due to theft. Many experienced contractors use site security cameras with motion detectors and real-time notifications to stop theft and help recover stolen property.

This year, the state of [Colorado indicted](#) a group of six California men who burglarized over 36 construction sites across Colorado in 2021. All told, they stole over \$1 million in tools, materials, and equipment and caused \$27,000 or more in property damage. A construction company in Lafayette, Colorado identified the suspects in this organized crime ring during a burglary, which helped police link them to the rest of their crimes across the state, leading to their capture.

One project manager for HE Homes in Indiana says that his company catches 80% of the people who try to steal from his construction sites because of their robust site security system. While real-time alerts give

the company a chance to dispatch authorities to the site, the cameras help identify important details like vehicles, the number of thieves, personal descriptions, and in which direction they escaped. [The Republic News](#) quoted the project manager saying, "We have an excellent capture rate because of our cameras." He added, "If you look at the more reputable and professional builders, they use cameras and alarms because they want to catch people and discourage thievery."

By now, most contractors know that a good site security system is essential, but there's a lot to consider when choosing the right camera. Megapixels, coverage, low light capability, and motion detection are just a few of the features that will impact camera quality. It sounds daunting, but choosing the right camera doesn't have to be a chore.

Below, we've broken down the most important features to look for in a site security camera to help you find the best quality camera system for your site.

## IMPORTANT SITE SECURITY CAMERA FEATURES

Features that separate the low-end site security camera systems from the higher-end systems are directly related to image quality, range, reliability, and ease of use. For contractors looking for a site security system that offers high-quality imaging and reliability at the best value, the features below will serve as a comprehensive guide.

### Specialized Day and Low Light Camera Modules

Site security cameras should provide high-quality security coverage both day and night. Unfortunately, cameras designed for daytime use typically perform poorly at night, and vice versa. That's because the ideal technical specifications for daytime cameras are vastly different from the ideal for low light (or night) cameras.

While daytime cameras use visible ambient light for image exposure, low light cameras use infrared technology to take detailed images in the absence of visible light.

Daytime cameras should have at least 12-megapixel resolution for maximum clarity, while low-light infrared cameras perform best at much lower resolution. That's because as the number of megapixels increases, the amount of light needed for a quality image also increases. Because the camera shutter has to remain open longer to get enough light in low-light situations, higher-megapixel camera images are subject to excessive motion blur, which can make intruder or vehicle identification impossible. High-end infrared low-light cameras rarely offer more than 2 megapixels for this reason.

Since the requirements for each lighting situation are unique, a site security camera should include two different camera modules that can capture high-quality images during the day as well as at night.

### WHAT TO LOOK FOR

- At least two integrated camera modules, one for daylight and one for low-light with infrared technology
- Minimum of 12-megapixel resolution daylight camera
- Maximum of 2-megapixel low-light infrared camera

## High Power Infrared (IR) Illuminator

### WHAT TO LOOK FOR

- A camera system that uses an IR floodlight illuminator with at least 25 watts of power
- Minimum of 100 feet of IR light coverage

For night capture, site security cameras should have a high-power IR illuminator. Many lower end security camera options feature several small integrated infrared LED lights that can only illuminate 20-30 feet in front of the camera. A quality security camera IR illuminator should have at least 25 watts of power. High power IR illuminators can increase the illumination range to 100 feet or more. As an added benefit, cameras with more IR illumination range allow for more site coverage with fewer cameras, which will save time and money.

## Thermal Motion Detection

Thermal motion detection is the best choice for professional security cameras covering large areas. This technology doesn't require visible light to detect motion, which means it functions just as well in complete darkness as it does during the day. Since thermal motion detectors can be controlled digitally, their sensitivity and masking can be easily configured to reduce false alarms. Compared with a well-known alternative, Passive Infrared (PIR) motion detection, thermal motion detection is much easier to deploy and configure while providing better coverage with fewer false alarms.

### WHAT TO LOOK FOR

- An integrated thermal motion detection sensor
- Remote digital sensitivity configuration and masking capabilities

## Low Light Digital Video Recording (DVR)

### WHAT TO LOOK FOR

- High quality, 24/7 capable low light DVR in addition to daylight DVR
- Two specialized cameras (daylight and low light)

DVR is an important site security camera feature for insurance purposes, and the best systems will offer high-quality DVR for both daylight and low-light conditions. A security camera system should have individual daylight and low light cameras that can each record DVR. This capability ensures that the camera captures all incidents, and not just the few seconds around motion-triggered events.

## Real-Time Text or Email Notifications

Site security cameras are most useful when they can alert the owner to motion events onsite. With real-time text or email notifications, contractors or project managers can immediately notify authorities during an ongoing security incident, which can help police capture the criminals and recover materials.

### WHAT TO LOOK FOR

- Real-time text and email notifications from the camera when motion is detected
- Ability to configure multiple notification recipients

## Solar Powered and Wireless

### WHAT TO LOOK FOR

- Solar powered camera system with wireless mobile capability

Site security cameras are the most secure and robust when they're fully solar and wireless. They'll stay running even when the power goes out, and since there are no ground wires, they're less likely to be disabled by thieves. Mobile-enabled cameras can operate without internet on the premises, which means they have less downtime and more resistance to power outages or intentional disconnection. Plus, solar-powered wireless cameras can run for years without interruption, making them both reliable and low maintenance.

## SITE SECURITY CAMERA FEATURE CHECKLIST

- At least two integrated cameras, one for daylight and one for low-light
- Minimum of 12-megapixel resolution daylight camera
- Maximum of 2-megapixel low-light infrared camera
- IR Illuminator with at least 25 watts of power and 100 foot range
- Integrated thermal motion detector with remote configuration
- Daylight and IR low-light streaming and digital video recording
- Real-time text and email notifications to multiple recipients when motion is detected
- Fully wireless system with solar and mobile data



## ABOUT SENSERA SYSTEMS

Simply put, Sensera Systems provides the most flexible, reliable, and affordable camera solutions in the industry.

Our professional solutions are purpose-built for the rigors of active jobsites, both large and small. Deployed on thousands of projects across North America, our solar/wireless solutions help protect stakeholders stay informed and remotely manage their LEM, logistics, risk, and safety from any location, in real time. Securely managed from a single platform, our solutions provide the most reliable and cost-effective real-time visual monitoring and documentation in the industry, all in a hassle-free package that is easy to setup and use within minutes.

For more information, visit [www.senserasytems.com](http://www.senserasytems.com)



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