



This is a complete time-lapse camera buyer guide for your projects this year (2022-23).

This detailed time-lapse camera buying guide will help you decide:

- Why do you need a time-lapse camera for your projects?
- What type of camera is right for your project?
- What technology to look for in a time-lapse camera?
- What characteristics should you look for in a time-lapse camera vendor?
- And advanced time-lapse camera buyer tips.

Note: Whenever I say time-lapse camera, It means time-lapse construction camera. Also, this [time-lapse camera guide is applicable](#) in various fields such as railways, travel, agriculture, construction, and more.

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Chapter 1:

Need for Time-lapse Camera

Every new technology or product design solves a specific problem. So does the time-lapse camera. It solves numerous project problems that a regular CCTV or surveillance system can not clear up. (Know more about [CCTV v/s Construction Camera](#))

In this chapter, I will answer the first and foremost problem-specific question, What are the main reasons behind the need for a time-lapse camera for your project site?

What is the reason you need a time-lapse camera on your project site?

The hike of technology evolution makes it clear to install the camera on Jobsite. Before investing, know why you [need a time-lapse camera](#) on your Jobsite.

1. Progress Monitoring
2. Security Recording
3. Video Surveillance
4. Project Management
5. Documentation
6. Communication And Collaboration
7. Marketing And Investor Relation
8. Data Reference For Future Projects

1. Progress Monitoring

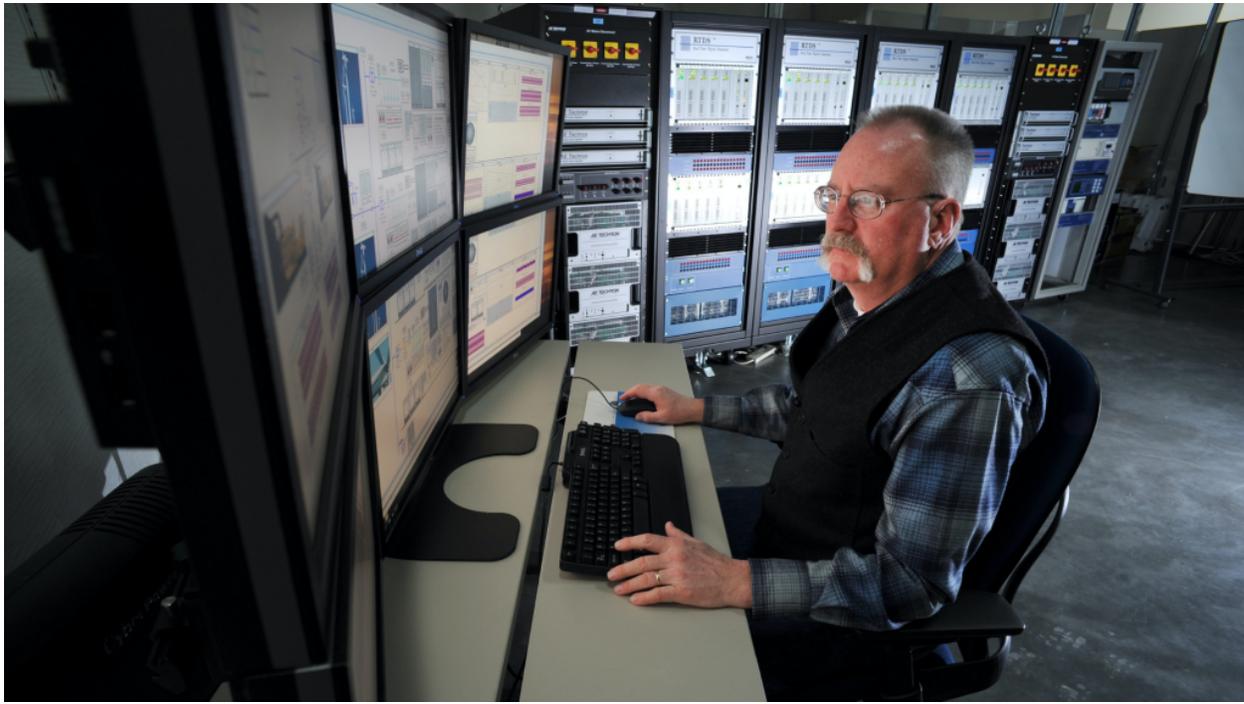
The main goal of progress monitoring is to complete the project on the scheduled time by making informed decisions. A construction camera with numerous features, such as real-time monitoring, event tagging, and project timeline, can aid in better progress monitoring. With a time-lapse camera, you can run regular project site assessments to ensure the construction is consistent.



2. Security Recording

Top security measures of a construction site are:-

- Theft
- Vandalism and
- Injury.



Happening of such events leads to inquiries or interrogations (hence the delay in the project schedule). Cloud storage-based construction cameras like Opticvyu are the better option for saving site recordings on the cloud server. These recordings can act as pieces of materialistic evidence in many cases.

3. Video Surveillance

An effective surveillance system observes improper activities, avoids accidents, and safeguards the work environment. Having video surveillance in place discourages criminal activity and records acts of employee theft. A regular CCTV can do all this video surveillance work, but time-lapse construction cameras have advantages over that (CCTV but time-lapse camera).



4. Project Management

Project management aims to achieve predetermined goals with effective coordination between human and material resources. Opticvyu camera allows the team to mark up essential activities on live images and share them with their colleagues.

5. Documentation

Documentation helps in

- Real-time communication and collaboration
- Budget management and accounting
- Resources management
- Business expansion
- Future references and more

Maintaining proper project documents is one of the tedious and time-consuming tasks for project managers. A time-lapse camera with cloud-based storage to act as a visual data documentation tool along with these features, Opticvyu also allows mobile images or videos to sync with project documents.

6. Communication And Collaboration

The team remains unaware of issues until it's too late to rectify them, resulting in delayed schedules and cost more money. A better time-lapse camera with multi-user monitoring makes communication and collaboration easier. Also, Opticvyu's time-lapse camera provides open access URLs that can be embedded on clients' websites and accessible by investors, customers, and stakeholders to create transparency and ensure better communication.

7. Marketing And Investor Relations

These fast-playing project videos showing the pace of project progress result in better client impressions and customer attraction. Timelapse cameras make it cost-effective to create timelapse video content for marketing outreach.



Multi-user dashboard and email sharing option empowers the project manager to keep the investors in the loop and update them with the project progress.

8. Data Reference For Future Projects

Complex projects often need reference data & experience from past projects for faster resolution of ongoing site issues. Time-lapse videos & HD images captured by the cameras can act as the best reference for expediting such projects.

Project planning helps connect the planning schedule with the construction visuals which eventually leads to the generation of event-based time-lapse videos. For example, a machine foundation construction event time-lapse video from one project becomes a benchmark for all the upcoming projects for the construction owner, contractor, or consultant.

What type of camera is right for your project?

Many construction firms and government entities use time-lapse cameras to monitor project progress. They choose the [time-lapse camera type](#) based on their project needs and conditions (weather, internet connection, power availability, and more).

Here are some basic and advanced time-lapse construction camera types based on the hardware options:-

1. Fixed position time-lapse construction camera
2. Pan tilt zoom time-lapse construction camera

3. 360-degree time-lapse construction camera
4. Indoor or interior time-lapse construction camera
5. Solar-powered time-lapse construction camera
6. Plug & play time-lapse construction camera

1. Fixed-position cameras

Fixed-position cameras produce high-resolution images with the widest viewing angles. It captures a sharp and more stable image. A fixed-position camera can be equipped with a regular lens, wide-angle lens, or even a fisheye lens to get desired results.

2. Pan-tilt-zoom camera

It has the robotic capabilities of moving & zooming the picture remotely. The pan-tilt-zoom camera has the following features:-

- Panning up to 360 degrees
- Larger job site area view

3. 360-Degree Camera

A 360° camera captures spherical images & the time-lapse video created out of it is also 360° time-lapse (see below). Especially suited for interior projects, the camera captures the 360° scene & doesn't leave a blind spot to avoid missing any ongoing activity across the site. It can cover 8x more area than a fixed camera with 50 or 60-degree FoV.

 [OpticVyu Construction Camera | 360 Degree Long-term Construction Time-lapse](#)

Alternate solutions

A time-lapse construction camera comes with three basic hardware options (Fixed position, Pan-tilt-zoom, and 360-degree). These cameras further categorize with the location of use and add-on features as:-

4. Indoor construction camera

According to the location of use, it is an Indoor construction camera. Its smaller size and lightweight build make it the perfect fit for indoor work compared to an outdoor construction camera. It is easier to mount & move.

5. Solar-powered camera

Sometimes, providing the power supply to the camera installation locations becomes a costly affair, in such cases, the solar-powered camera acts as a standalone system for remote site monitoring. It uses solar energy to power up the whole camera system. When no electric power supply is available, it helps to monitor the project site with a battery & solar system mount. It can work on cellular service internet connectivity.

6. Wireless Camera/Plug & play camera

As the name shows, it does not require wired internet & it operates through a SIM-based 4G/LTE cellular network. It is also known as a mobile construction camera. It has all features of a time-lapse camera, such as time-lapse monitoring, security recordings, 360-degree monitoring, and live streaming. These cameras are most suited for the installation at inaccessible locations like tower cranes, light masts, high poles, etc where the provision of external internet is not possible.

What technology to look for in a time-lapse construction camera?

There must be many features that can empower better monitoring of your job site. We have listed some necessary features that you should look for when buying a time-lapse construction camera.

Time-lapse Customization:- A full-featured timelapse camera must allow customizing the timelapse video output. (such as frame rate, time-lapse duration, and frequency). Advanced customization options like frame blending, DEFlickering, stabilization, etc are the cherry on top.

Cloud-based Remote Monitoring:- It must have a remote monitoring feature so that you can monitor your projects from anywhere in the world.

BIM Integration:- It is an add-on feature that makes the progress comparison easier by overlaying the bim model over the current project site images.

Opticvyu superimposes the exported Revit 3D model over the actual camera image, and you can check the difference between the actual v/s planned construction.

CCTV Time-lapse Conversion:- It is a feature of a time-lapse monitoring dashboard that shows the capability of converting an existing CCTV into a full-feature time-lapse camera

Reporting: Automatic reporting will help you check the progress reports directly shared on your email on a weekly, biweekly, or monthly basis.

Mounting Flexibility:- Depending upon where you will mount the camera, it must be flexible:

- a. Fixed mounting
- b. Mobile trailer (moving timelapse camera using a motorized pan slider or rotor).

What characteristics should you look for in a construction camera vendor?

Not only that time-lapse camera concludes the effective monitoring of your project site. You have to verify for features provided by your timelapse construction camera vendor. Here are four main characteristics you should look for in the vendor while buying a time-lapse camera.

1. Installation services at your project site

The camera vendor may only provide you with the camera, and you can install it on your job site. Suppose you do not have the right resources or a qualified engineer to install the camera. In that case, you must look at whether the camera vendor provides the camera installation service at your project site or not.

2. Camera Features

A time-lapse camera vendor must provide camera feature variations to suit the project site conditions. Some examples of camera feature variations are

- [PM air quality detection](#) for monitoring the air quality with a single device
- Infrared night vision to monitor the project site even during the night with a good visibility
- Telephotography or wide-angle photography to monitor the large view of the project site with less number of cameras
- Plug and play camera option to reduce the hassle of the setting of the camera
- Best network option where no Wi-Fi or land cable internet connectivity is available

3. Software

The camera vendor should provide software to monitor the project's progress. This software must have the following features:-

- Auto camera software update
- Timelapse customization ability
- Continuous implementation of the new feature with the same plan
- Easy access to archived images & time-lapse videos
- Inbuilt camera software security
- Cloud-based storage security
- Authorized access control
- Data backup option
- Backup data to multiple data centers to ensure durability

4. Support

Support is the primary and necessary characteristic that you should look for in your time-lapse construction camera vendor. Good customer support helps resolve camera downtime & feature issues and also educates you about the camera software/features.

Opticvyu has all these characteristics and gives you various options to connect the support through email, contact form, phone call, or live chat.

Best Time-lapse Camera for Construction

OpticVyu time-lapse camera makes it easy to capture still photographs - over hours, days, weeks, months, or even years and lets you condense that footage into a short video with its

interactive easy-to-use dashboard. You can use OpticVyu time-lapse cameras for anything you want to record a time-lapse for, like construction progress, agriculture, railways, power generation, manufacturing, and more.

[OpticVyu time-lapse camera](#) comes with different variations:

1. 45MP time-lapse camera
2. 24MP time-lapse camera
3. 4MP & 8MP time-lapse camera
4. PTZ time-lapse camera
5. 360-degree time-lapse camera

Conclusion

An in-depth understanding of time-lapse camera needs, camera types, technology, and vendor characteristics will help you make informed decisions while choosing the time-lapse camera for your project.

Still need expert advice on choosing the best time-lapse camera, [contact us](#). To learn more about OpticVyu time-lapse cameras, [watch the demo video](#).