The Complete Guide to Mobile Video Solutions for the Utility Industry

Mobile video solutions are becoming more commonplace in the utility industry. Utility drivers travel from job site to job site, and companies need to ensure their drivers are following proper procedures, keeping them and others around them safe.

Likewise, the roads are littered with distracted and negligent drivers, so having cameras capturing the journey tells the whole story, exonerating your drivers from false claims.

What is a Mobile Video Solution?

Simply put, a mobile video solution is a set of cameras and DVRs (digital video recorders) implemented to record around moving objects. Side, rear and forward-facing cameras on a vehicle are examples of a mobile video solution. This differs from security cameras, which are stationary or only record a specific area.

Forward-facing Cameras Record the Drive

Forward-facing cameras, or dash cameras, record what the driver sees. Additionally, some forward-facing cameras also record in the cab of the truck to record what the driver is doing. In-cab cameras paired with forward-facing cameras tell a complete story. If there was an incident where a utility driver had to swerve off the road to avoid hitting a car, both cameras will tell you what the driver saw and what the driver was doing leading up to the incident.

Did the car cut off the utility truck or was the truck driver distracted by their phone only to see they were about to hit a car because they weren't paying attention?

Side Cameras Help Drivers Navigate Congested Areas

Side cameras are helpful when drivers need to operate in tight areas. A monitor in the cab can be configured to automatically display the side cameras when needed. Generally attached near the cab of the truck by the side mirrors, the driver can get a clear view of their blind spots on either side.

Rear Cameras Help Avoid Accidents

Just like with side cameras, a monitor in the cab of the truck can automatically display the blind spot behind the truck when it is in reverse.
With all cameras, continuous recording can be set up to record as soon as the ignition switch is on and stay on for a set number of minutes after the ignition is off, meaning you won't miss a crucial event.

Why Consider Mobile Video Solution?

There are several reasons for considering a mobile video solution for your utility truck.

Safety

The biggest reason to implement a mobile video solution is to keep everyone safe, including drivers and those around the drivers. According to the Insurance Institute for Highway Safety, 4,119 people died in large truck crashes in 2019. Sixteen percent of these deaths were truck occupants, 67% were occupants of other passenger vehicles and 15% were pedestrians, bicyclists or motorcyclists.

Having side and rear cameras helps drivers navigate congested areas and reduces accidents, thus reducing downtime to make repairs and keeping your fleet running at maximum efficiency.

Exonerate Drivers

When driving at high speeds on freeways, accidents can happen in an instant. It can be difficult for utility truck drivers to remember the incident exactly how it happened. However, with 360° coverage surrounding your trucks, you will have video evidence as to how an accident happened.
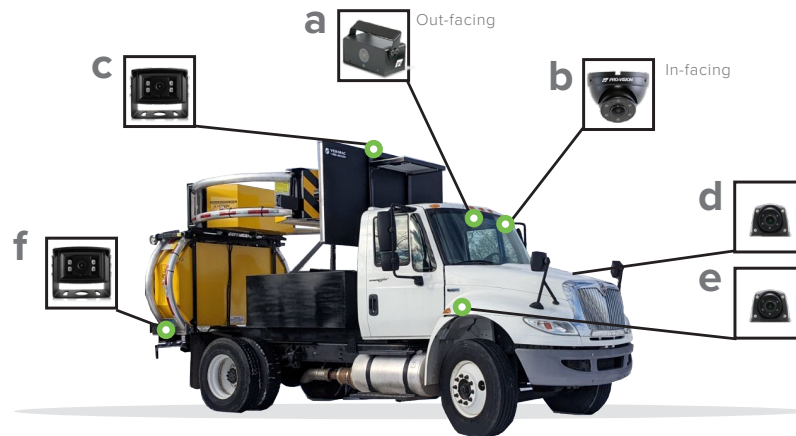
Video solutions protect your drivers from false claims and save you money on unnecessary litigation costs.

Tell the Whole Story

Everyone wants to know the truth, and mobile video solutions provide that. With multiple camera angles and cameras focused on the road and drivers, you can get all the details should an incident occur.

Coach/Train Drivers

Recorded footage is great for training new employees or revisiting safety procedures with current employees. Ensure proper protocols are being followed and correct unsafe driver behavior with real-world lessons.

What Features Does a Mobile Video Solution Offer?

Whether your mobile video solution just includes side and rear cameras or a complete view of your vehicles, there are several features to consider.

Field of View

The field of view is an important factor in determining which camera to purchase. The bigger the field of view, the more activity that can be recorded. Most mobile video cameras provide anywhere from 110- to 170-degree field of view.

Some specially designed cameras, like stop-arm cameras designed for school buses, feature a field-of-view of 180°.

Pre- and Post-event Recording

Pro-Vision's mobile video solutions ensure you won't miss a crucial detail. With pre- and post-event recording, you can retain the footage captured before and after an event. This is helpful if you don't have the hard drive space to be continuously recording and can't begin recording before an incident or forget to turn it on after an incident.

Automatic Triggers

Automatically record key events without worrying about them being recorded over when a DVR runs out of space. Maneuvers such as a hard brake, stop or turn are automatically recorded and will remain on the DVR to be reviewed.

Additionally, an event marker button can be placed in the cab so the driver can manually mark events that don't fall under the automatic triggers.

Durability

Exterior cameras are exposed to harsh environments, including rain, snow, dirt and mud. Pro-Vision cameras are IP69K rated to perform in these conditions and feature 17.3G shock ratings to withstand rough, bumpy roads.

The onboard DVRs also feature solid-state hard drives. Unlike hard disk drives, SSDs feature no moving parts or the mechanical failures that come with them, making them perfect for the utility industry.

Sonar and Sensors

In addition to a visual view with an in-cab monitor, sonars and sensors located at the rear of vehicles can be added to give drivers audio cues when an object is too close. Danger areas can be configured to alert drivers from as far as 17 feet.

Data Management

Pro-Vision offers an optional video management solution, CloudConnect, which is a cloud-based solution that simplifies the data management process and saves time. CloudConnect allows you to request video and share footage with individuals either inside or outside your organization while storing the data on Pro-Vision's cloud.
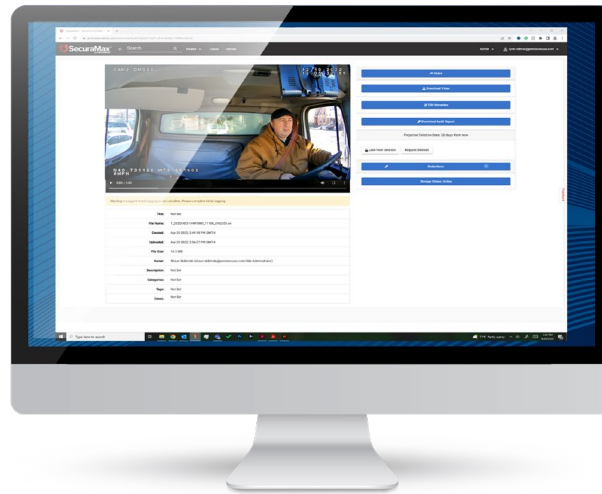
What Questions Should I Ask
When Considering a Mobile Video Solution?

Now that you've got a good understanding of what a mobile video solution is and why it would be beneficial to your organization, you've probably got a lot of questions.

Every organization's wants, needs and capabilities will be different, but every mobile video solution can be customized to work for you.

Some key questions to ask are:

- What type of warranty comes with the products?

- Can the solution be upgraded should you need to add more coverage later?

- Is extensive training needed to learn how to use the solution?

- What type of training is included?

- How do I keep software up to date?

- How do I access the video footage?

- What happens when the DVR runs out of space?

- Does it matter what operating system (Windows, Mac, etc.) I use when accessing videos?

- Are there any monthly costs associated with a mobile video solution?

- Is it a one-size-fits-all type of solution or is there a variety of options that are selected to fit my unique needs?

- Where and how exactly are the cameras going to be mounted on the vehicles and what will the views look like?

- Who is handling the installation & implementation process?

- Is the system integrable to other programs and ecosystems?

- Does the system utilize an open API architecture ?

Warranty/Upgrade

Most Pro-Vision cameras and products come with a 5-year warranty, and more cameras/DVRs can easily be added should you decide you want to expand your coverage later.

Training/Software Updates

Extensive training is not needed to operate the solution, but should you need assistance, Pro-Vision's support team is just a phone call or email away. Your installation technician will configure your mobile video solution to your desired settings and answer any questions you have about using the system.

Pro-Vision's support page offers firmware updates to make sure your equipment is running smoothly.

Accessing Video Footage

To access video footage from Pro-Vision cameras and DVRs, you use the PV Player program to submit a video request. The footage is sorted by date and camera. You could also hook up an SD card to your computer if you don't want the footage to be on a network or the cloud.

DVR Out of Space

When there is no more free space left on the DVR, it begins recording over the earliest recorded footage. However, automatically triggered events or events marked with an event marker button will never be recorded over.

Operating System

Pro-Vision's equipment only works on Windows operating systems.

Monthly Fees

Should you decide you want to host your video footage on our cloud, there would be a monthly fee to store and keep that data secure. Otherwise, there are no other monthly fees.

One-size-fits-all

Every mobile video solution can be customized to fit your needs. Even if you've got an out-of-the-box idea for how you want your company to utilize a mobile video solution, we will work with you to determine the best way to accomplish your goals.

Where Are Cameras Mounted?

Dash cams generally are mounted on the windshield inside the vehicle, side cameras generally are mounted on exterior body panels near the side view mirrors and rear cameras generally are mounted behind the vehicle, either on the bumper or on top of the vehicle. Of course, depending on the vehicle and your goals, the location of these mounts could change.
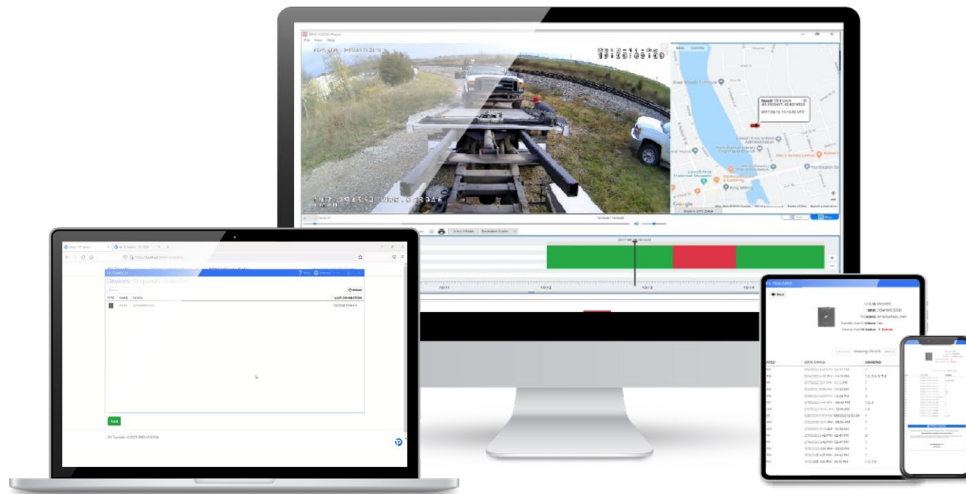
Installation Process

Pro-Vision has a national team of installation experts that will set up your system and configure system settings so when installation is complete, you're ready to go.

Ecosystem Integration

Pro-Vision's system can be integrated with other programs and mobile video solutions. For example, if you have a dash camera but are looking to add side and rear cameras, Pro-Vision's hardware will work with your old hardware for a complete view of your vehicle.

API Utilization

If you were previously working with a telematics company to obtain vehicle tracking data, Pro-Vision's API (application programming interface) allows you to seamlessly integrate the mobile video solution into a telematics company's back-end dashboard.

Do you have more questions that we haven't covered here or in our other industry-specific articles? Contact a sales representative to help get your questions answered and find a mobile video solution that fits you.

About Pro-Vision

Founded in 2003, Pro-Vision is a leading video technology solutions provider trusted by thousands of organizations in 58 countries. Pro-Vision solutions include vehicle video recording systems, body-worn cameras, data management and cloud-based storage solutions. Pro-Vision's transit, law enforcement and commercial partners utilize these solutions to enhance safety, increase productivity and protect critical assets.

PRO•VISION®

VISIBLY BETTER