



Things to Consider Before Purchasing a Video Surveillance System

Wired or Wireless?

Wireless camera systems are not truly wireless. A wireless camera must have a reliable power source to provide video 24/7. The requirement for a power source to a wireless camera greatly diminishes the benefits of having a wireless system. AvertX IP cameras obtain power from the NVR and send video over a single Ethernet cable up to 300 feet. Running Ethernet cable to a camera location is usually much easier than adding a new power outlet. In addition, the wireless system may encounter signal interference, have lower resolution and speed and have less flexibility in terms of control over the video. Reliable performance may be difficult to achieve with a wireless system. To achieve the absolute best overall performance, reliability, longevity and flexibility for video surveillance—especially for outdoor applications—a good quality wired IP system is the best answer.

6 reasons to choose an IP system

There are many reasons for investing in an IP system over an analog system. Here are the top 6:

1. Digital format allows for much more control and flexibility for video capture, recording, playback, and transmission of the video over the internet and to tablets and mobile phones.
2. High Resolution for crisp video, image control and digital zoom
3. Easy to install with single cable for both power and video
4. Camera Intelligence such as zoned motion sensing and privacy masking
5. Can be updated with easy-to-apply software upgrades, extending the life of your investment.
6. Cutting edge technology

The challenge of installing a video surveillance system!

We understand that a professional grade system from AvertX is a significant investment so thinking through a plan to accomplish your objectives will result in the best outcome. We recommend the following minimum precautions to help make the installation a successful experience:

- Start with a plan to include the location of the NVR, location of the cameras and type of cameras.
- Have the necessary tools to run wire from the NVR to the cameras and to mount the cameras.
- For safety reasons, especially if climbing ladders, AvertX recommends a minimum of two people working together to install a system.
- If needed, you may want to consider hiring a qualified installer or certified electrician to run the wire and install the cameras in accordance with your plan.

What camera is right for you?

AvertX Professional Grade cameras are versatile and can be used in a variety of applications. The two camera types below have different attributes to help you with your design objectives.

- **HD40D Mini Bullet Camera**

Easy to mount. Small size allows it to be placed in tight places. Ball joint mount for a wide variety of surfaces including surfaces with angles. Wide 93 degree angle view. No requirement to open the camera unless a microSD card is installed for back up. Focus is preset.

- **HD810 Dome Camera**

Visually appealing. Spectrum Vision True WDR offers more options in diverse lighting conditions. The 3x optical zoom and autofocus provides more mounting location options to achieve the view that is important to you. More effort and care required to mount. Optional wall mount bracket accessory is available from AvertX.

Camera Positioning

A few tips are listed below:

- Mount cameras at least 10ft off the ground for best field of view and to ensure the camera is out of reach of an intruder.
- Do not point cameras directly into the sun or highly reflective surfaces.
- Avoid placing cameras in areas where water may flow freely during rainfall – mounting under eaves or overhangs is ideal.
- Run camera cables out of sight and reach to avoid tampering

Placing the NVR

The NVR is the heart of your system, and careful consideration must be taken to make sure it is protected and reachable by your camera cables.

- The NVR should be placed in a dry space that does not exceed the listed operating temperature specifications for the NVR – attics or garages are usually not ideal unless careful preparations are made. Avoid placing the NVR in areas with no airflow or near flammable materials.
- AvertX recommends a “bench test” before performing full installation of your system – after unpacking the system, connect all cameras and boot up the system before proceeding with installation.
- The NVR has an onboard fan to ensure the system is cooled properly – this fan will sound slightly louder than an average PC fan. Consider this in your placement plan if you are sensitive to low level fan noise.

Running Cables and connecting to a camera

- Your system or camera kit includes 100ft of Cat5e cable. This should work for most installations, however if more cable is required it must be purchased separately and cannot exceed 300ft per camera unless a PoE injector is installed along the line.
- Run Ethernet cable away from electric motors/industrial equipment or industrial lighting or similar items that may generate a high level of electrical noise or interference. In some cases, it may be necessary to run shielded (STP) Ethernet cable.

- AvertX recommends protecting your cable by running through conduits or inside a wall since the cable is not outdoor or plenum rated.
- AvertX cameras and cables have waterproof connectors eliminating the requirement for a sealed electrical box to protect the connection.

AvertX PRO Team

- The AvertX PRO Team is available for design or installation advice via phone or email.