

# SightLogix Design Guidelines

*When preparing for your SightLogix installation, the following will help ensure a smooth, successful deployment.*

## SightSurvey

Complete a **SightSurvey** (<http://www.sightlogix.com/sightsurvey-tool/>) to ensure that **blind spots are properly covered** and that detection FOVs cover areas as needed.

Confirm that an **up-to-date Google Earth** image is available, especially for newly constructed facilities. If a Google Earth image is not available, you can purchase a high-resolution Google Earth Pro aerial map from SightLogix. For the most current map it may be necessary to source an image from an aerial imaging company.

SightSensors must have a **clear line of sight**. They cannot detect through trees, buildings, fence fabric or other obstructions. Always conduct an **in-person visit to walk the site**. Physical obstructions may not be present on the aerial map or SightSurvey.

## Mounting Height and Pole Specifications

### SightSensor Mounting Height

SightSensors **must be mounted at the proper height** for expected detection accuracy. Higher mounting heights are usually better.

Mount shorter-range SightSensors with detection ranges of less than 175 meters (NS160 and below) at **no less than 7 meters** higher than the field of detection. Mount longer-range SightSensors with detection ranges of greater than 175 meters (NS195 and above) at **no less than 10 meters** higher than the field of detection.

Unique to SightLogix, SightSensors use electronic stabilization to address pole sway from wind, vibrations or other environmental factors. This eliminates camera shake as a cause of misdetects and nuisance alerts. However, the following additional considerations should be taken, **especially when detecting at longer ranges**.

SightLogix recommends concrete, aluminum or steel poles. We do not recommend wood, telephone/utility or surveillance poles. (In addition to pole sway, wood poles will shrink, causing detection zones to shift unpredictably.) An example of a quality concrete pole is <http://www.baldwinpole.com/concrete-products.html>.

Best practices for pole selection and design include:

1. Evaluate wind loading of all pole-mounted devices and establish maximum wind speed for normal operation. Use SightLogix Wind Induced Forces (<http://www.sightlogix.com/wind-forces>) to calculate wind loading for SightLogix devices. Use other manufacturer's data for other pole-mounted devices.
2. Once you know the wind forces, refer to SightLogix Pole Mounting Guidelines (<http://www.sightlogix.com/pole-mount>) for maximum permitted pole deflection for each SightSensor type (i.e., NS600, etc.)

3. Refer to your pole documentation to verify deflection will be less than the recommended maximum on the SightLogix Pole Mounting Guidelines (<http://www.sightlogix.com/pole-mount>) at the wind speed selected.
4. When mixing SightSensors (i.e., NS600s with NS120s), always defer to the more sensitive deflection specification.

Use a **camera bracket** (for example, SL-MNT-EM1450 for Gen 3 Sight Sensor). Refer to the SightLogix Accessories datasheet for available mounting options (<http://www.sightlogix.com/datasheets/>).

## Lightning Protection

SightSensors have been designed using IEEE surge protection standards to protect against surges caused by environmental factors. While no equipment can withstand a direct lightning strike, precautions should be made to reduce the damage associated with lightning and other surge-related situations (See SightLogix “Lightning Surge Suppression Procedure” at <http://www.sightlogix.com/surge>.)

It is strongly recommended that external surge protection methods be utilized at the pole to ensure proper grounding for all the electronic subsystems and components. For wired networks, **use fiber** to bring communications to the pole to further reduce the impact of electrical surges.

## Network Infrastructure Requirements

- 100 megabits/second or higher Ethernet infrastructure is required for network connectivity
- Network Time Protocol (NTP) is necessary for SightSensor time/date rules and for all SightTracker use.

## Ports

The following ports should be open for the SightLogix system. (There may be alternatives for some ports; check with SightLogix support for details).

- 80, 8080 (HTTP)
- Ports 443 and 8443 (SSL HTTP)
- Port 427 (Discovery/SLP)
- Port 19539 (Coordination System (CS))
- Port 554 (MPEG4 Video)
- Port 22 (SSH)
- Port 123 (NTP)
- Port 427 (UDP - Discovery)

## VMS

SightLogix systems require a supported VMS for viewing video at your site. Check the SightLogix Partner Portal for the list of pre-integrated and supported third-party systems. (<http://portal.sightlogix.com/help/vms-and-ptz-integrations>)

## SightTracker Considerations

For best performance, co-locate each PTZ associated with a SightTracker on the same pole as the SightSensor(s). Also mount your PTZ at 7 meters or higher.

SightTrackers only support PTZ cameras on the SightLogix Certified PTZ list (<http://portal.sightlogix.com/help/article/link/sighttracker-third-party-ptz-support>). Note that older PTZs that meet the requirements sometimes need updated firmware to work correctly.