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.

SightTracker Considerations

SightTracker alarmed target tracking performance is dependent on both the SightSensor (SS) and associated PTZ to be mounted at the same location (same pole). The PTZ should be mounted below the associated SightSensor. Mount your PTZ at 7 meters or higher.

If multiple SightSensors are mounted at a particular location it is possible to associate more than one SightSensor to a SightTracker/PTZ to minimize components and system cost.

If the colocation design requirement is not followed SightTracker performance will be affected and the alarmed target may not be followed in the PTZ FOV.

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

Mounting Height

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

For cameras that will detect intruders 300 meters and below, the recommended mounting height is no less than 7 meters higher than the field of detection.

For cameras that will detect intruders 300 meters and above, the recommended mounting height is no less than 10 meters higher than the field of detection.

Pole Specifications

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. (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 (https://dyzz9obi78pm5.cloudfront.net/app/image/id/58b07ddd91121c272343ce52/n/wind-induced-forces-sightsensorgen3.pdf) (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 (https://dyzz9obi78pm5.cloudfront.net/app/image/id/55e9c63b32131c1a7d08b5c1/n/SightSensor-Pole-Mounting-GuidelinesGen3.xls) (*link will download an .xls file*) 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 (https://dyzz9obi78pm5.cloudfront.net/app/image/id/55e9c63b32131c1a7d08b5c1/n/SightSensor-Pole-Mounting-GuidelinesGen3.xls) at the wind speed selected.

4. When mixing SightSensors (i.e., NS600s with NS120s), always defer to the more sensitive deflection specification.

5. 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 Protecting Your SightLogix Equipment from Electrical Surges (https://portal.sightlogix.com/help/surge-lightning-protection)).

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
- Open source Network Time Protocol (NTP) as per RFC-5905 is necessary for SightSensor time/date rules and for all SightTracker use. Proprietary time sources such as windows time server are not acceptable.

Ports

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

TCP	UDP
427 (discovery/slp)	427 (discovery/slp)
80 and 8080 (http)	3702 (ONVIF Discovery) May be reported as ws-discovery
443 (https)	3703 (ONVIF Discovery) May be reported as adobeserver-3
8443 (https-alt)	5353 (discovery avahi/zeroconf)
8009 (CS) (tomcat)	123 (ntp)
19539 (cs)	
554 (mpeg4 video/rtsp)	
22 (ssh)	
2222 (ssh)	

VMS

SightLogix systems require a supported VMS for viewing video at your site. Refer to VMS and PTZ integrations (https://portal.sightlogix.com/help/vms-and-ptz-integrations) for list of pre-integrated and supported third-party systems.