The STS Shield System

The first and only active monitoring traffic signal sensor. Making any signal a smart signal.

Traffic Signal Conflicts and Misalignments are Dangerous

Traffic signal conflicts and misalignment can happen when the (traffic, pedestrian, train, etc.) signal is exposed to heavy winds, acts of vandalism, accidents and commercial vehicle interactions. Unfortunately, when the signals and signs are turned out of alignment, it creates a dangerous situation at an intersection. This condition contributes to many accidents, near misses, and puts lives at risk. The STS Shield System was designed to notify command and control centers immediately when a traffic signal is turned from the intended direction.

Reactive to Proactive Monitoring

Jurisdictions generally rely on a public notification model, where citizens report problems with traffic signals being out of alignment or not working. Then, the DOT or other responsible party will have to go out and make the repairs. There may be instances where it takes weeks—maybe months—for the turned heads to be properly realigned simply because they are not reported timely. With the STS Shield System, an immediate notification is received by command and control when a signal is misaligned, and provides the opportunity to take action immediately.

About the Sentinel STS Shield System

The STS Shield System from Sentinel is an automated active monitoring device. The shield system will report turned heads to the governing jurisdiction immediately. As soon as the head turns, a circuit is opened in the STS Shield System, sending signals through the existing communication lines to the command structure. This way, proper personnel are notified immediately when a signal head has been turned at an intersection they are monitoring.

Sentinel developed the STS Shield System to keep the public safe while also helping reduce the jurisdiction's liability if accidents happen due to a turned head or damaged traffic signal. The STS Shield System can lead to signal head resolution within hours, rather than weeks or months. The current record from alarm to repair is 15 minutes.

STS Shield System Features and Benefits

One of the best advantages of the STS Shield System is that it adapts easily to existing traffic signal infrastructure. It does not require expensive upgrades or a complicated installation process. It has hanger and mount capabilities, meaning it can mount easily to any existing traffic light or pedestrian signal head. Most of this equipment already has spare wires inside, which the STS Shield System can utilize to send signals back to the control cabinet.

Will the STS Work with Our Existing Signal Equipment?

Yes, the STS Shield System is a cost effective solution that adapts to your existingequipment, making any signal a smart signal with active monitoring technology.
Depending on the number of available outputs in your cabinet, the STS Shield System can monitor the intersection using one big circuit or multiple circuits. It provides real-time monitoring, so when the signal head gets turned out of proper alignment, the command center is immediately notified.

Compatibility: side mount, mast arms, wire hanger, post top, pelco mount

Connectivity: monitoring can be one circuit for the intersection or individual circuits for each corner depending on the number of available input/outputs in your cabinet.

Sensitivity- 3 to 35 degrees of rotational movement before an alarm is generated. The range of allowable rotation can be determined by each jurisdiction standard, most users prefer a range of 10-15 degrees of allowable rotation.

Environmental Data- operational temps as tested -30 degrees C to 80 degrees C