sensorswitch®

TLS, Twist-to-Lock Sensor FAQ

What control capabilities does the SensorSwitch™ TLS Twist-to-Lock Sensor offer?

TLS, Twist-to-Lock Sensor is an occupancy sensor with daylight dimming. It is designed to detect motion in spaces from 8 ft to 45 ft mounting heights. It adjusts the lighting levels based on the amount of natural daylight, optimizing energy usage.

For added convenience, behavioral sensor settings may be changed for the following:

1. Maximum Brightness (high trim setting) – For occupancy sensors with daylight dimming, this typically represents the brightest setting the connected light luminaires will reach when the sensor detects occupancy or when the ambient light is insufficient.
2. Hold Time (occupancy time delay) – The time the luminaire is on after the sensor no longer detects occupancy or motion.
3. Daylighting Setpoint (measured in footcandles) – A sensor's daylighting setpoint (or daylight setpoint) is the threshold at which the sensor adjusts or dims the luminaire based on the amount of natural light in the space.

How does daylight dimming work with the sensor?

The TLS Sensor measures the ambient light levels and adjusts the luminaires to maintain consistent brightness in the space. When setting the sensor footcandle (fc) setpoint, it is important to remember that the measurement is at the sensor, not the surface area of the work location. The TLS Sensor allows footcandle settings from 1fc to 50fc.

The TLS sensor has an auto-setpoint feature which measures the light in the space with the luminaire on and off and will find the optimum setpoint value automatically. Auto setpoint works best for applications under 25ft.

What types of spaces are ideal for the TLS Sensor?

Ideal spaces include warehouses, manufacturing plants, stock rooms, large retail stores, and other industrial or commercial areas with high-ceilings and varying light levels due to natural daylight.

Is the TLS Sensor compatible with all Acuity Brands luminaires?

The TLS Sensor was designed specifically for the Lithonia Lighting® REBL luminaire.

How difficult is it to install the TLS Sensor?

The TLS Sensor was designed for efficient tool-less installation, where no wiring is required for assembly. The TLS sensor is very easy to install, simply remove and discard the cap, align the sensor, twist it into the correct position, and lock it into place.

How do I make behavioral setting changes on the TLS Sensor?

The TLS Sensor behavioral settings may be changed using the SensorSwitch Infrared Wireless Programmer (IWP). IWP allows for easy adjustment of settings using bi-directional communication allowing changes from floor level. It also supports our new SensorSwitch Passive Powerless Programming (PPP) which allows settings changes while the device is unpowered. With the IWP, installers or owners write and read sensor settings.

How does the TLS Sensor handle high-temperature or harsh environments?

The TLS Sensor is designed to operate in industrial settings, where temperatures can fluctuate. The TLS sensor temperature range is -40°F/-40°C to 176°F/80°C. The sensor is an ingress protected solution supporting IP66 rating.

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FAQ

How does SensorSwitch evaluate its occupancy sensor performance?

SensorSwitch evaluates its occupancy sensors to NEMA WD 7-2011 test methodology. The test is conducted by an independent third party that accurately assesses sensor performance. Testing to a NEMA standard guarantees that the product is suitable for its intended application and environment. Occupancy detection performance is neither skewed nor exaggerated.

What is NEMA WD 7-2011 and why is it important?

NEMA WD 7-2011 is a standardized test procedure used to evaluate the performance of occupancy sensors. It ensures reliable detection, provides a consistent benchmark, helps identify blind spots and it certifies sensor performance in real-world conditions for energy savings and lighting control.

How is the NEMA walk test conducted?

The NEMA Walk Test setup, environment, and conditions are detailed and specific. Overall, the test involves a subject physically walking through the detection area of an occupancy sensor at various positions and distances. The subject moves at a predetermined distance and speed while monitoring the sensor's ability to detect motion at set intervals. To learn more, visit NEMA.org.

What is the expected lifespan and warranty of the sensor?

The TLS Sensor is designed to last for years in of harsh, rugged environments. SensorSwitch standard 5-year warranty covers this device; however, an extended warranty may be purchased.

One Lithonia Way, Conyers, GA 30012 | Phone: 800.535.2465 | www.acuitybrands.com