

Surface Mount Sensor

SPECIFICATION

The Enlighted Surface Mount Sensor is designed for indoor applications with high ceilings such as warehouses, atriums, and manufacturing facilities. Integrated sensors capture data that is both processed locally and transmitted over the Enlighted network, enabling a full suite of applications. In addition, the sensor supports Bluetooth[®] Low Energy communication with tags and other BLE devices.

OVERVIEW

The Surface Mount Sensor is a complete sensing and lighting control node powered from its attached light fixture. Sensor information combined with a configurable behavior profile makes the Surface Mount Sensor an integral component of an intelligent lighting control and sensing solution. With integrated wireless communications for data transmission and remote configuration as well as autonomous fixture-level control, this sensor brings advanced lighting automation to a whole new level.

FEATURES AND BENEFITS

Enlighted Sensor Interface (ESI): IoT Ready[™] LED drivers and Enlighted Control Units communicate with the sensor directly via a serial interface. The ESI provides access to device information, energy consumption, and digital lighting control.

Localized Lighting Control: Light-level schedules, preferences, and profiles for each fixture are wirelessly communicated at system setup and stored for continuous operation.

Edge Sensing: Local processing capability supports advanced sensing and detection algorithms, providing optimization of existing features and enabling future applications.

Bluetooth Low Energy: An embedded BLE radio allows the sensor to receive and transmit beacons as well as support communication with lighting control devices and other sensors.

Occupancy and Thermal Sensing: A digital Passive Infrared (PIR) sensor combined with ambient and temperature sensing support motion identification while minimizing false detection events.

Tunable White: Dual channel control supports tunable white fixtures, enabling color transitions based on time of day or user control.

Daylight Harvesting: Captured ambient light information is locally processed to raise and lower light levels based on available daylight.

Room and Zone Control: Pairs with room control switches for code-compliant manual-on or auto-off capability. Sensors can be grouped into zones that share occupancy sensing data and coordinate light control based on detected motion.

IoT Sensing Node: When configured as an IoT Node, the sensor streams comprehensive live data for use with Enlighted's real-time location and analytics software applications. This option is available directly from the factory or as a remote upgrade.

Standards-Based Networking and Security: The Enlighted 802.15.4 wireless network with AES-128 encryption delivers secure, reliable communication that coexists with Wi-Fi networks by sensing low-traffic channels and transmitting in bursts.

Data Privacy: The sensor captures occupancy data in the sensor coverage area. The sensor cannot directly reference or identify any natural person.

Driver Compatibility: Dimming and on/off control signaling for standard 0-10V ballasts and drivers in LED and fluorescent fixtures.



The Enlighted Surface Mount Sensor

L	3.46"	88 mm
W	3.46"	88 mm
H	1.18"	30 mm

ENLIGHTED SPECIFICATION SUBMITTAL

Job Name:

Job Number:

Product Codes:

SU-5S-H-LoT

SU-5S-H-CL

SU-CL-LoT-UPG

CPL-RJ45

CBL-RJ45-RJ45-7F

BTTN-SU-2-00

BRKT-SU-2-00

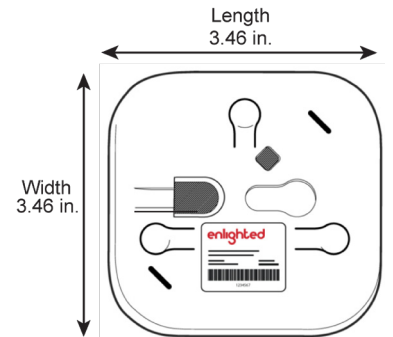
Surface Mount Sensor

MOUNTING

The Surface Mount Sensor comes with a nylon threaded screw for mounting in acoustical tile or drywall ceilings. Pendant button mount and flat metal bracket mount options are available separately.

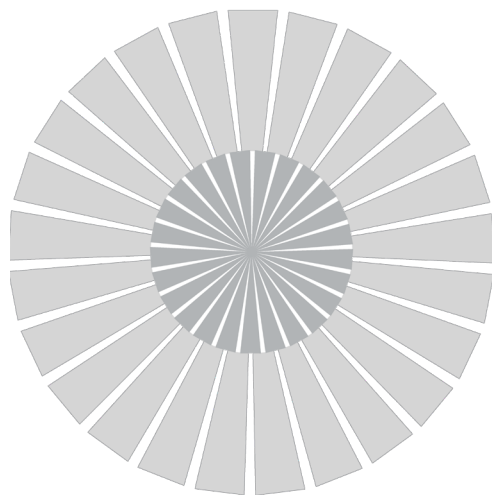
SENSOR COVERAGE PATTERNS

The Enlighted Surface Mount Sensor incorporates an optical Fresnel lens that works with the digital Passive Infrared (PIR) sensor to detect occupancy and motion. The multifaceted lens focuses light onto the PIR to produce an all-encompassing field of view through aggregation of many narrow fields of view. When the Surface Mount Sensor is deployed as recommended, the area covered by each sensor overlaps, reinforcing coverage and accuracy across the entire floor plan.

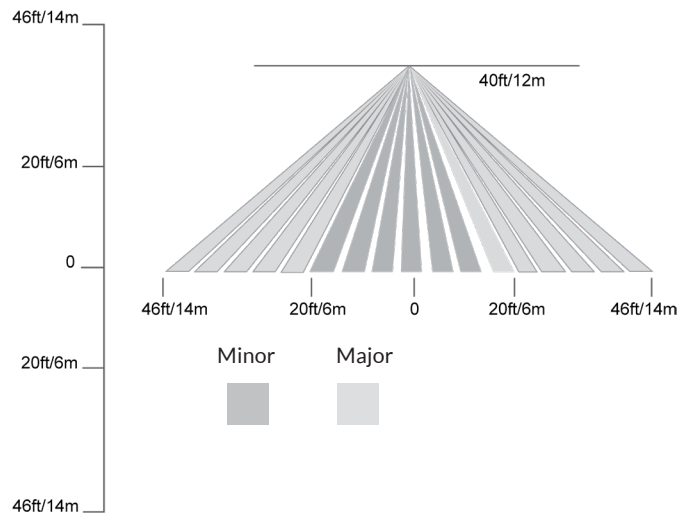


Ceiling Height	Minor Motion (Radius)	Major Motion (Radius)
20 ft/6 m	10 ft/3 m	23 ft/7 m
40 ft/12 m	20 ft/6 m	46 ft/14 m

Top View



Side View



TECHNICAL SPECIFICATIONS

- Motion Sensing:** Digital Passive IR
- Photosensor:** Light Pipe/Photosensor Array
- Enclosure:** Recyclable ABS
- Type:** Closed Loop Light Sensor
- Operating Temp:** 32° to 122° F/0° to 50° C
- Radio Frequency:** 2400–2483.5 MHz
- Wireless Protocol:** IEEE 802.15.4
- Wireless Range:** 150 ft. (46 m) radius open range
- Encryption:** AES-128
- Max. Install Height:** 50 ft/15.25 m

Bluetooth 4.0 Low Energy (BLE):

- Operating Frequency: 2400–2483.5 MHz
- IEEE Standard: 802.15.1

Bluetooth: The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Enlighted Inc. is under license. Other trademarks and trade names are those of their respective owners.

ORDERING INFORMATION

- SU-5S-H-IoT Surface Mount IoT Sensor
- SU-5S-H-CL Surface Mount Connected Lighting Sensor
- SU-CL-IoT-UPG Connected Lighting to IoT Sensor Upgrade
- CPL-RJ45 Female RJ45 Coupler
- CBL-RJ45-RJ45-7F 7 foot Sensor Cable for CU-4 and IoT Ready™ drivers
- BTTN-SU-2-00 Pendant Button Mount
- BRKT-SU-2-00 Bracket Mount

COMPLIANCE

- Europe: CE, RoHS, REACH, UL LISTED
- United States: FCC, UL LISTED
- Canada: cUL LISTED

WARRANTY: 5 years

View www.enlightedinc.com/limited-warranty-terms for complete terms and conditions