SENSOR1 / SENSOR2

Motion, light, temperature and humidity sensing

Product specifications



PRODUCT OVERVIEW

Sensor1 is a stand-alone, mesh-enabled sensor for occupancy / vacancy, ambient light, temperature, and humidity data.

Sensor2 connects to the Luum ALC via RJ12 and leverages onboard 6LoWireless communication to transmit sensing data.

Both sensors are designed for standard-height ceiling applications and support real-time dashboard reporting.

CONFIGURATIONS

XWS-S1: Stand-alone wireless sensor.

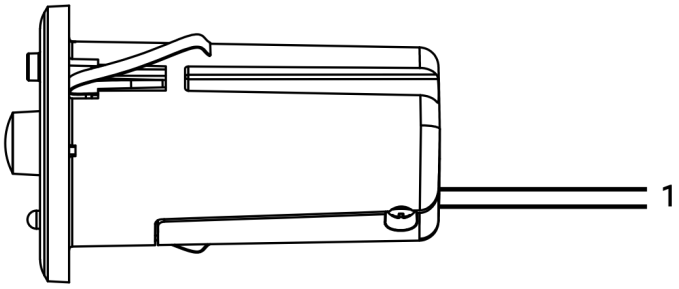
XWD-S2-H/V: Add-on horizontal or vertical RJ12 sensor.

XWS-S1-DIM: Includes 0-10V output for fixture control.

FEATURES

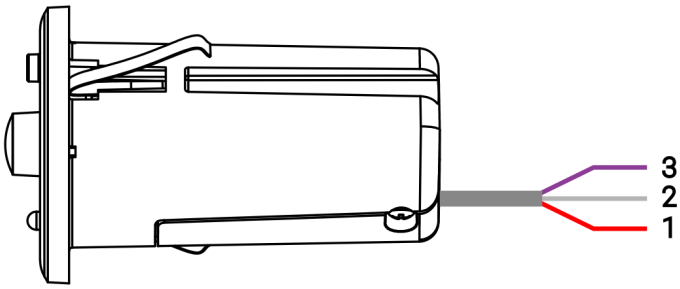
Sensor functionality	Motion (occupancy/vacancy), ambient light, temperature and humidity sensing
	Sensor blinders included to optimize detection regions
	Real-time data for control and energy dashboard
Simple installation	Sensor1 requires low-voltage power connections
	Sensor2 includes RJ12 cable and mounting bracket for Luum ALC connection
	Spring clips for securing the sensor to the wall or ceiling
Simple startup	Remotely configurable / upgradeable
	Luum app commissions all devices on the mesh network
	Unique IPv6 address
Energy code	Complies with ASHRAE 90.1-2016 and CA Title 24 requirements
Warranty	5-year limited warranty with uninterrupted connection of the Luum Border Router device from a network

XWS-S1 WIRING



1. Low Voltage Input (Polarity Insensitive)

XWS-S1-DIM WIRING



1. Low-Voltage Positive Input
2. Low Voltage Negative Input / 0V Output (Common)
3. 0-10V Dimming Output

Note: Actual performance may vary as a result of end-user environment and application. Specifications subject to change without notice.

*Based on clear line of sight. Interior obstructions may limit range.

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TECHNICAL SPECIFICATIONS

Category	Specification	XWS-S1	XWS-S1-DIM	XWD-S2-H/V
COMMUNICATION	Wireless Transmit Range	Up to 200 feet line of sight to nearest mesh connected device		N/A
	Communication	Embedded 6LoWireless		Connects to the Luum Advanced Load Controller to communicate with the 6LoWireless mesh network
	Encryption	AES 128-bit		
DETECTION	Detects	Motion, Ambient Light, Temperature and Humidity		
	Detection	8 m (26.2 ft) L x 7 m (23 ft) W rectangle at 3 m (9.8 ft) mounting height		
	Motion Sensor	Passive Infrared (PIR) sensor detects motion, indicated via orange LED on device		
	Temp / Humid Accuracy	±0.5 °C from 15 °C to 40 °C (±0.9 °F from 59 °F to 104 °F); ± 3.5% rH from 20% to 80% rH		
MECHANICAL	Dimensions	57.5 mm (2.25 in) w x 42.9 mm (1.69 in) h x 32.4 mm (1.25 in) d		36.4 mm (1.44 in) h x 25.4 mm (1 in) d
	Mounting	Inserted into 1 in hole in ceiling tile		Inserted into 3/4 in hole in ceiling tile
	Finish	Matte White Finish		
	Enclosure	Type 2		
ELECTRICAL	Input Voltage	9-26VDC, polarity protected		
	Connections	9-26VDC low-voltage polarity insensitive power wires	Violet (+10V dimming wire), gray (0V) control wires and single red low-voltage power wire	RJ12 port
	Outputs	N/A	0-10V control wires for direct fixture control	N/A
ENVIRONMENTAL	Installation Environment	Commercial, Indoor/Covered		
	Temperature Range	-28 °C to 37 °C (-20 °F to 100 °F)		
GENERAL	System Compliance Note	Device contributes to Luum system compliance with ASHRAE 90.1-2016 and CA Title 24 reqirements		
	Warranty	5-year limited warranty with continuous cloud connection		

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