



Product specifications

Detect MLTH with:  
**SENSOR 1**

Mesh network enabled motion, light, temperature and humidity sensor



## PRODUCT OVERVIEW

The Amatis Controls Sensor1 MLTH communicates wirelessly with other connected Amatis devices using our proprietary 6LoWireless protocol to enable controls for vacancy, occupancy, daylight harvesting, temperature and humidity.

The Sensor1 MLTH is a stand alone device that does not require a driver or controller to communicate with the 6LoWireless mesh network. Amatis provides one of the smallest and most powerful combination motion and light sensors on the market.

## CONFIGURATIONS

- The Amatis Sensor 2 is available in two configurations:
- SENSOR 1 - for standard height, ceiling applications up to 12 feet / 5m radially with optimal resolution.
  - SENSOR 1-HB - for highbay height ceiling, corner, corridor and wall applications up to ~40ft / 12m radially with optimal resolution.

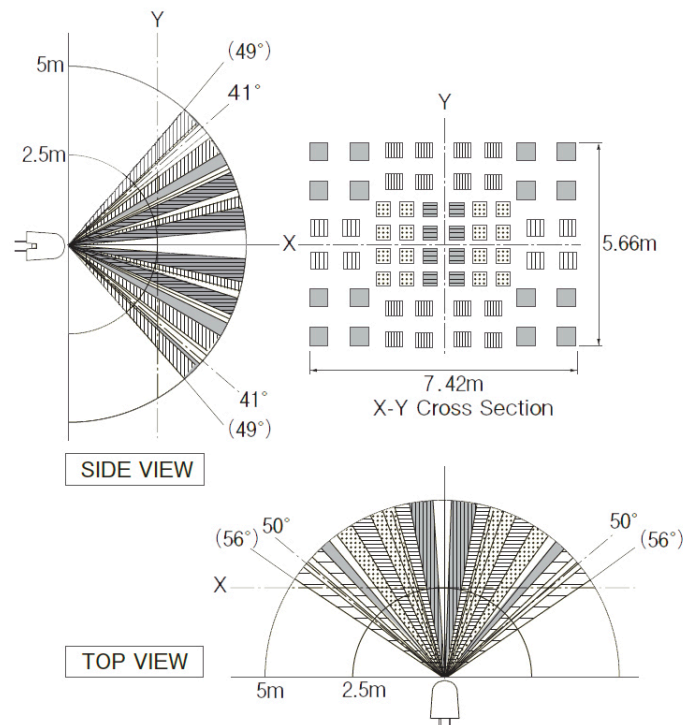
## FEATURES

SENSOR 1 FUNCTIONALITY	Enables controls for motion (occupancy/vacancy), light, temperature and humidity
	Built-in IPv6 mesh and wireless antennae provide robust signal strength and reliable communication
	Ideal for standard AC applications with a power converter or DC micro-grids
	Includes blinders to optimize detection region of motion sensor and ambient light sensor
	Standalone device that does not require a driver or controller to communicate
EASY, PLUG-AND-PLAY INSTALLATION	Can be installed flush into ceilings or walls
	Requires two low-voltage power connections
SIMPLE, WIRELESS COMMISSIONING	Remotely configurable / upgradeable
	Amatis app easily commissions all devices on the mesh network
	Unique IPv6 address
	Real-time data uploaded to the Energy Dashboard
CODE COMPLIANCE	Complies with ASHRAE 90.1-2016 and CA Title 24 requirements
WARRANTY	10-year limited warranty with uninterrupted connection of the Amatis Border Router device from a network

## LED INDICATOR REFERENCE TABLE

Green LED: indicates powered but no motion detected  
Orange LED: indicates motion detected

### Standard detection region

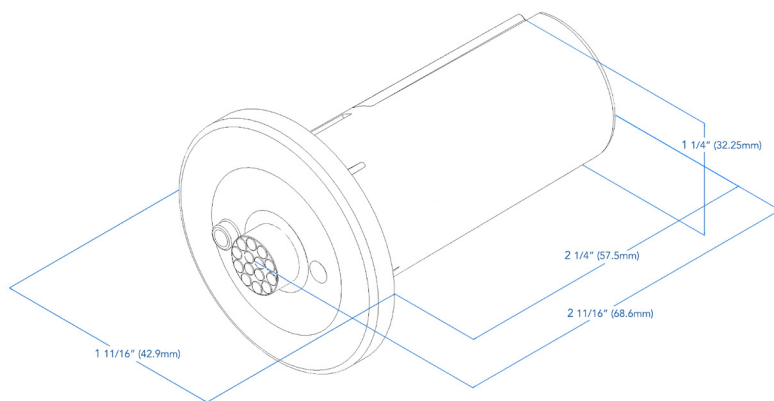


## TECHNICAL SPECIFICATIONS

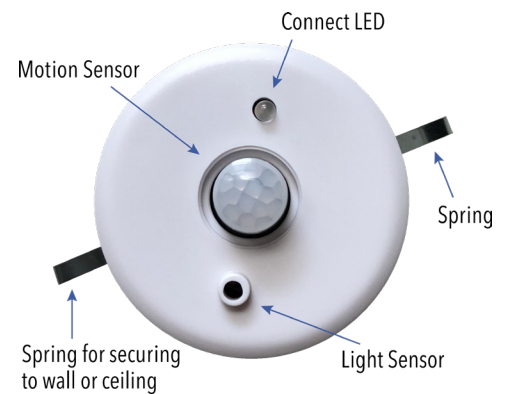
COMMUNICATION	Wireless transmit range*	Up to 200 feet to nearest mesh connected device
	Communication protocol	Embedded 6LoWireless
	Encryption	AES 128-bit
DETECTION	Detects	Motion, Ambient Light, Temperature and Humidity
	Detection radius	Sensor 1: 5 meters radially / up to 12 feet; standard height ceiling applications Sensor 1-HB: 12m radially / up to 40 feet; high bay height ceiling, corner, corridor and wall applications
	Motion sensor	Passive Infrared (PIR) sensor detects infrared light, indicated via orange light on device
ELECTRICAL	Input voltage	24VDC
	Conductors	2 core connect between 9-30VDC
MECHANICAL	Dimensions	2 11/16" (68.6 mm) w with tip 2 1/4" (57.5 mm) w 1 11/16" (42.9mm) h 1 1/4" (32.35mm) d
	Color	White
	Finish	Matte
	Enclosure	Type 2, Plenum Rated
	External outputs	On-board button for manual control, ETL
ENVIRONMENTAL	Installation environment	Commercial, Indoor/Covered
	Temperature range	-20°F to +100°F (-28°C to 37°C)
	Temperature accuracy	±0.9°F from 59°F to 104°F (±0.5°C from 15°C to 40°C)
	Humidity accuracy	+/- 3.5% rH from 20% to 80% rH
GENERAL	Standards / Ratings	FCC Device contributes to Amatis system compliance with ASHRAE 90.1-2016 and CA Title 24 requirements

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

### Dimensioned isometric



### Sensor diagram



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

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**amatis**™



Product specifications

Detect MLTH with:  
**SENSOR 2**

Motion, light, temperature and humidity sensor with horizontal or vertical RJ12 connection



## PRODUCT OVERVIEW

The Amatis Controls Sensor2 MLTH connects to the Amatis Smart Driver or the ALC via the included RJ12 leveraging their on-board 6LoWireless communication to transmit occupancy, vacancy, daylight levels, temperature and humidity. Amatis provides one of the smallest and most powerful combination motion and light sensors on the market.

## CONFIGURATIONS

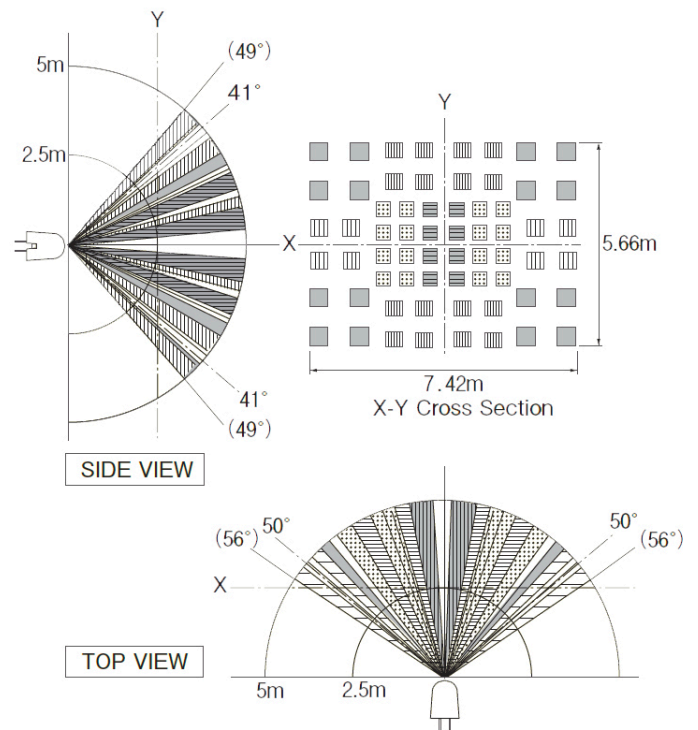
The Amatis Sensor 2 is available in two configurations:

- SENSOR 2 - for standard height, ceiling applications up to 12 feet / 5m radially with optimal resolution.
- SENSOR 2-HB - for highbay height ceiling, corner, corridor and wall applications up to 40 feet / 12m radially with optimal resolution.

## FEATURES

	Enables controls for motion (occupancy/vacancy), light, temperature and humidity
<b>SENSOR 2 FUNCTIONALITY</b>	Used with the Amatis Controls Smart Driver or Advanced Load Controller
	Includes blinders to optimize detection region of motion sensor and ambient light sensor
<b>EASY, PLUG-AND-PLAY INSTALLATION</b>	Can be installed flush into ceilings or walls, or attached directly to fixtures with an available mounting bracket
	Includes RJ12 cable for connection to Advanced Load Controller or Smart Driver
<b>SIMPLE, WIRELESS COMMISSIONING</b>	Remotely configurable / upgradeable
	Amatis app easily commissions all devices on the mesh network
	Unique IPv6 address
	Real-time data uploaded to the Energy Dashboard
<b>CODE COMPLIANCE</b>	Complies with ASHRAE 90.1-2016 and CA Title 24 requirements
<b>WARRANTY</b>	10-year limited warranty with uninterrupted connection of the Amatis Border Router device from a network

Standard detection region



## LED INDICATOR REFERENCE TABLE

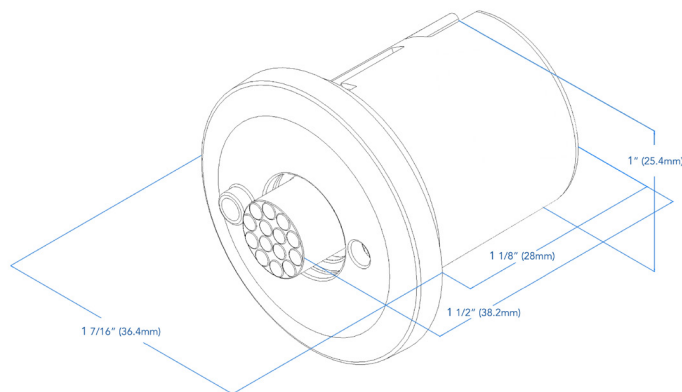
Green LED: indicates powered but no motion detected  
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## TECHNICAL SPECIFICATIONS

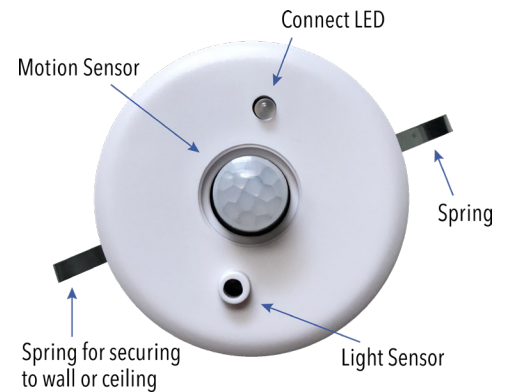
COMMUNICATION	Wireless transmit range*	N/A
	Communication Protocol	Connects to the Amatis Advanced Load Controller or Smart Driver to communicate with the 6LoWireless mesh network
	Encryption	AES 128-bit
DETECTION	Detects	Motion, Ambient Light, Temperature and Humidity
	Detection Radius	Sensor 2: 5 meters radially / up to 12 feet; standard height ceiling applications Sensor 2-HB: 12m radially / up to 40 feet; high bay height ceiling, corner, corridor and wall applications
	Motion sensor	Passive Infrared (PIR) sensor detects infrared light, indicated via orange light on device
ELECTRICAL	Input Voltage	24VDC
	Conductors	2 core connect between 9-30VDC
MECHANICAL	Dimensions	1 1/2" (38.2mm) w w/tip 1 1/8" (28mm) w 1 7/16" (36.4mm) h 1" (25.4mm) d
	Connections	RJ12 port
	Color	White
	Finish	Matte
	Enclosure	Type 2, Plenum Rated
	External Outputs	On-board button for manual control, ETL
ENVIRONMENTAL	Installation Environment	Commercial, Indoor/Covered
	Temperature Range	-20°F to +100°F (-28°C to 37°C)
	Temperature Accuracy	±0.9°F from 59°F to 104°F (±0.5°C from 15°C to 40°C)
	Humidity Accuracy	+/- 3.5% rH from 20% to 80% rH
GENERAL	Standards / Ratings	FCC Device contributes to Amatis system compliance with ASHRAE 90.1-2016 and CA Title 24 requirements

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### Dimensioned isometric



### Sensor diagram



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