DESCRIPTION
The LumaWatt Pro Two-wire Fixture Mount Sensor features digital PIR occupancy, ambient light sensing, daylight harvesting, and environment monitoring, providing all the benefits of LumaWatt Pro’s Smart Sensor technology. The sensor also includes a Bluetooth 4.0 BLE radio for beaconing. Simple to mount within a LED lighting fixture, the sensor operates seamlessly to create a comfortable space and communicates data wirelessly to the LumaWatt Pro control network. Designed for indoor lighting applications, the LumaWatt Pro Compact Sensor features onboard intelligence.

OVERVIEW
The LumaWatt Pro Two-wire Fixture Mount Sensor is designed so the device installs into the fixture cavity, leaving only the sensor face visible, making it an ideal choice for adding intelligence while maintaining aesthetics. The 18 AWG solid copper wiring between the sensor and a compatible LED driver simplifies installation and provides plug and play capabilities. With a durable wireless antenna, digital motion, ambient light, temperature sensing, and distributed intelligence, the Two-wire Fixture Mount Sensor makes advanced lighting control a reality for any fixture manufacturer.

SPECIFICATION FEATURES

**Localized Control**
Local microprocessor and memory in each sensor enable a sequence of operations at the fixture, eliminating dependence on any other network component once system setup is completed. Fixtures can operate without an active Gateway or Energy Manager, ensuring no single point of failure.

**Software-Driven**
Light-level schedules, preferences, and behavior settings definable for each fixture are saved in the sensor’s local memory as a software profile. Profiles are wirelessly communicated to sensors during system setup and can be easily modified when desired.

**Occupancy Sensing**
Digital PIR detection is supplemented with data from the ambient light sensor for precise detection of changes in the coverage area and minimized false tripping.

**Bluetooth 4.0 Low Energy (BLE)**
Incorporates a BLE radio and broadcasts beacons. Beacons can be turned on or off using the LumaWatt Pro Energy Manager.

**Manual-on/Vacancy Sensing**
When paired with the wireless LumaWatt Pro Room Control (LWP-WS-2-00), the sensor acts as a vacancy sensor providing code-compliant manual-on/auto-off capability.

**Daylight Harvesting**
An ambient light sensor captures light level data from the coverage area. The sensor then interprets this data and transmits code-compliant control commands to the LED driver to raise and lower light levels based on available daylight.

**Thermal Sensing**
Reports the ambient temperature at the sensor location.

**Zone Control**
Sensors can be grouped into zones, thereby allowing multiple fixtures to share occupancy sensing data and respond simultaneously to occupant motion patterns in specific building areas.

**Full Reporting Functions**
Granular and frequent data collection enables deep, insightful reporting and analytics for local occupancy, power consumption, light levels, and temperature data.

**Standards-Based Networking and Security**
The LumaWatt Pro wireless network reliably coexists with Wi-Fi networks adhering to the 802.15.4 wireless protocol, transmitting in bursts and appropriately selecting low-traffic channels. AES-128 encryption provides robust data security.

**Simple and Low-Cost Installation**
Single wiring connection to fixtures with no other above ceiling wiring required. One sensor-per-fixture approach simplifies the installation process.

**Lighting Technology Compatibility**
Sensor dimming and on/off signals are compatible with the Philips Xitanium SR LED driver (model # XI040C110V054VPT).

**Warranty**
5 years

TECHNICAL SPECIFICATIONS

- **Motion Sensing**: Digital Passive IR
- **Photosensor**: Light Pipe/Photosensor Array
- **Enclosure**: ABS/Polycarbonate blend
- **Type**: Closed Loop Light Sensor
- **Operating**: 32° to 122° F / 0° to 50° C
- **Radio Frequency**: 2460–2483.5 MHz
- **Wireless Protocol**: IEEE 802.15.4
- **Wireless Range**: 150 ft. (46m) radius open range
- **Encryption**: AES-128
- **Bluetooth 4.0 Low Energy (BLE)**
  - Operating Frequency: 2400–2483.5 MHz
  - IEEE Standard: 802.15.1
  - Broadcasting Interval: Configurable
MOUNTING

The LumaWatt Pro Two-wire Fixture Mount Sensor can be easily integrated into lighting fixtures through a 1/2 inch trade size knockout or .875 inch (22mm) hole. Just unscrew the faceplate from the sensor, insert the threaded part through the knockout, and reattach the faceplate from the outside of the fixture. A spring washer ensures that the faceplate is flush with the fixture. After the sensor has been properly mounted into a fixture, only the paintable white faceplate is visible.

COMPACT SENSOR COVERAGE PATTERNS

The LumaWatt Pro Two-wire Fixture Mount Sensor uses infrared technology to detect occupancy. The human body emits heat as infrared light. The sensor incorporates a multifaceted lens to focus this light on to a passive infrared (PIR) detector. Using patented algorithms, the LumaWatt Pro two-wire Fixture Mount Sensor analyzes the PIR’s output and determines if a person is present.

The LumaWatt Pro Two-wire Fixture Mount Sensor produces an all-encompassing Field of View (FOV) by aggregating many repeated narrow FOVs. For the typical 8.5 feet ceiling, minor and major motion can be detected up to 5 feet radius and 10 feet radius respectively. For a 16 feet ceiling, minor motion can be detected up to 9 feet radius and major motion up to 18 feet radius.

DIMENSIONS

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<th>Body</th>
<th>2.03&quot;</th>
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ORDERING INFORMATION

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<tr>
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<td>LumaWatt Pro Two-wire Fixture Mount Sensor</td>
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Controlled Fixture Wiring Diagrams

(1:1 Dimming) - Fixture with 1 Sensor and 1 LED driver