



Senor E

Beacon & Range Extender



Product Overview

Senor E is a bi-directional communication device that can be positioned at various locations throughout the BLE Mesh network to extend its coverage. This USB powered wireless BLE5.2 based device also supports beacons and comes with an external stick antenna for better communication.

Senor E is a part of Lumos Controls ecosystem supported by controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards.

The ecosystem is listed by the **Design Lights Consortium (DLC)**, qualifying it for energy conservation incentive programs and rebates by utility companies.

Specifications

Electrical

| Specifications | Value | Remarks |
|----------------|-------|-----------------|
| Input voltage | 5VDC | USB type-A |
| Input current | 15mA | Typical current |

Bluetooth

| Specifications | Value | Remarks |
|--|----------------|--|
| Frequency range | 2402 - 2480MHz | |
| Max output power | 8dBm | Conductive |
| Receiver sensitivity | -92dBm | |
| Connection distance (device to device) | 45m(147.6 ft) | Vary depending on the installation environment |

Features

- Increases the Lumos Controls BLE Mesh network range
- Supports iBeacon, Eddystone beacon, Eddystone beacon URL, Alt beacon, and Custom beacon
- Stick antenna for better wireless communication
- Unit powered by a USB type A adapter
- Zero downtime Over-the-Air (OTA) firmware updates

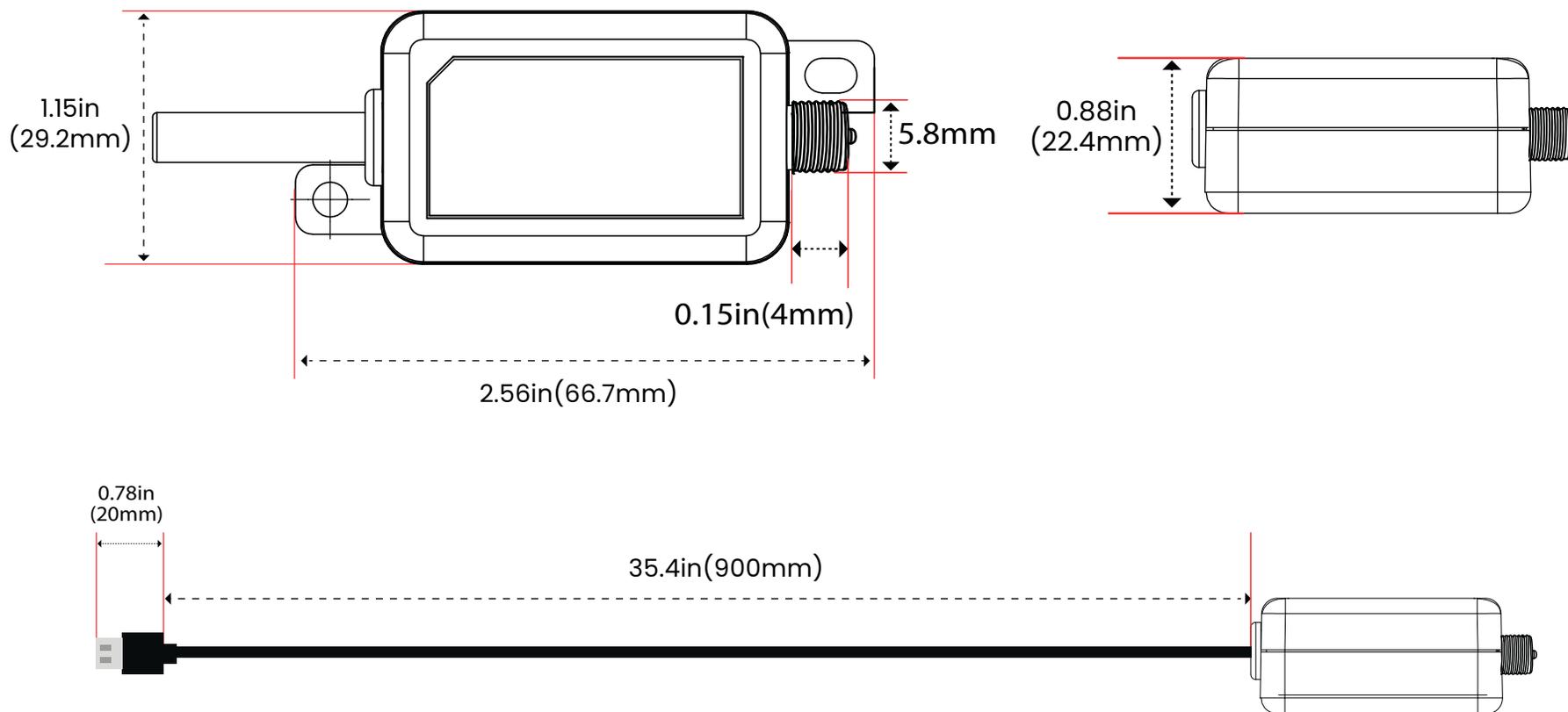
Environmental

| Specifications | Value |
|-----------------------|---------------------------|
| Operating temperature | -40 to 50°C(-40 to 122°F) |
| Storage temperature | -40 to 85°C(-40 to 185°F) |
| Relative humidity | 85% |

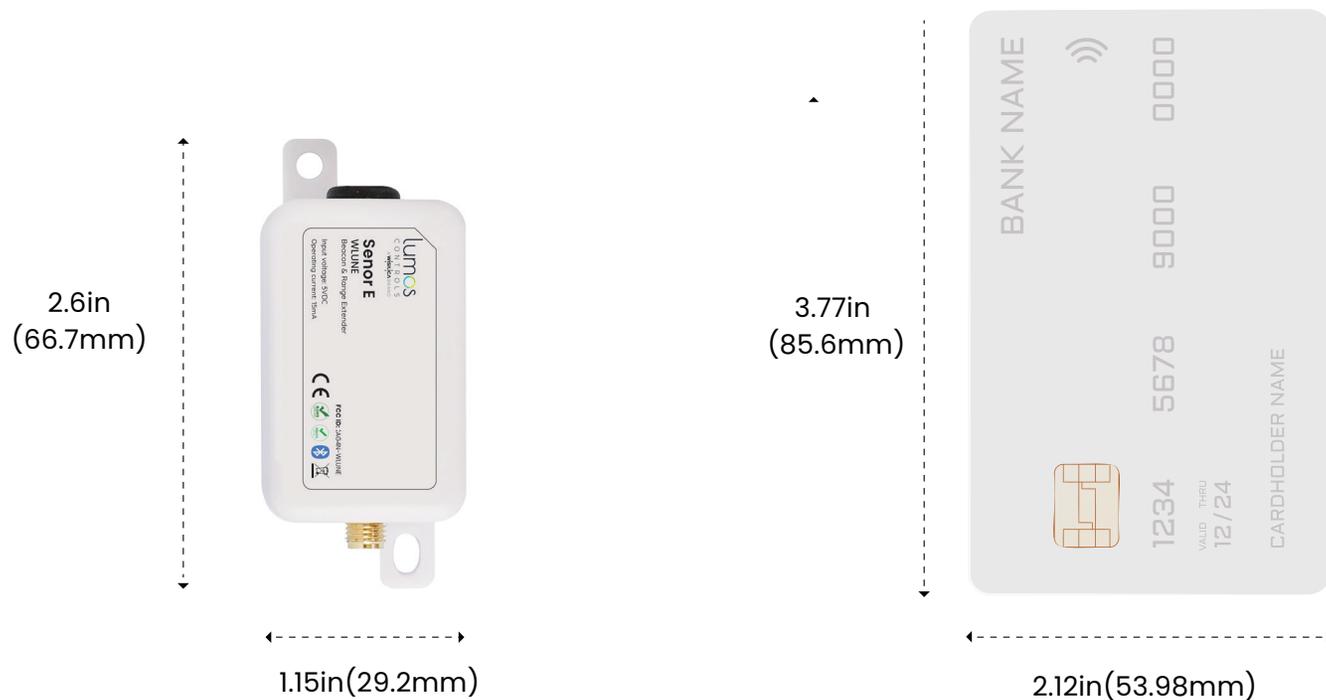
Mechanical

| Specifications | Value | Remarks |
|---------------------|---|-----------|
| Dimensions | 2.56 x 1.15 x 0.9in (66.7 X 29.2 X 22.4mm) | L X W X H |
| Weight | 84g(2.96oz) | |
| Case material | Polycarbonate | White |
| Flammability rating | UL 94 5VA | |

Product Dimensions



■ Size comparison with a standard credit card



Interface Description



Antenna Information

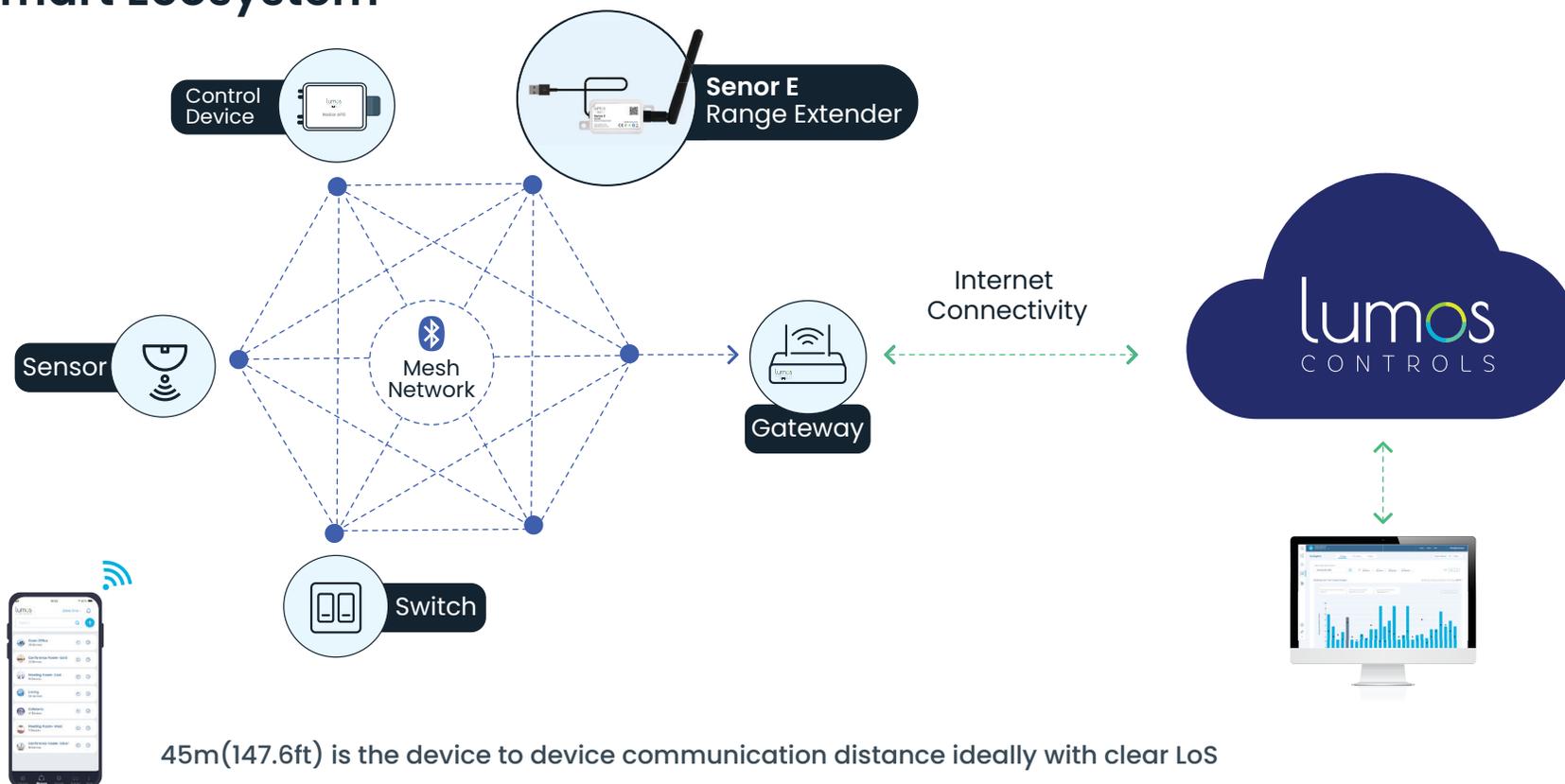
Stick antenna



| Antenna Properties | |
|--------------------|------------------|
| Frequency range | 2.4GHz-2.5GHz |
| Impedance | 50Ω |
| VSWR | ≤ 1.8 |
| Return loss | ≥ 12dB |
| Gain(peak) | 2dBi |
| Power handling | 10W |
| Polarization | Vertical |
| Radiation pattern | Omni-directional |

**Wire antenna option available. Please contact sales*

Smart Ecosystem



45m(147.6ft) is the device to device communication distance ideally with clear LoS

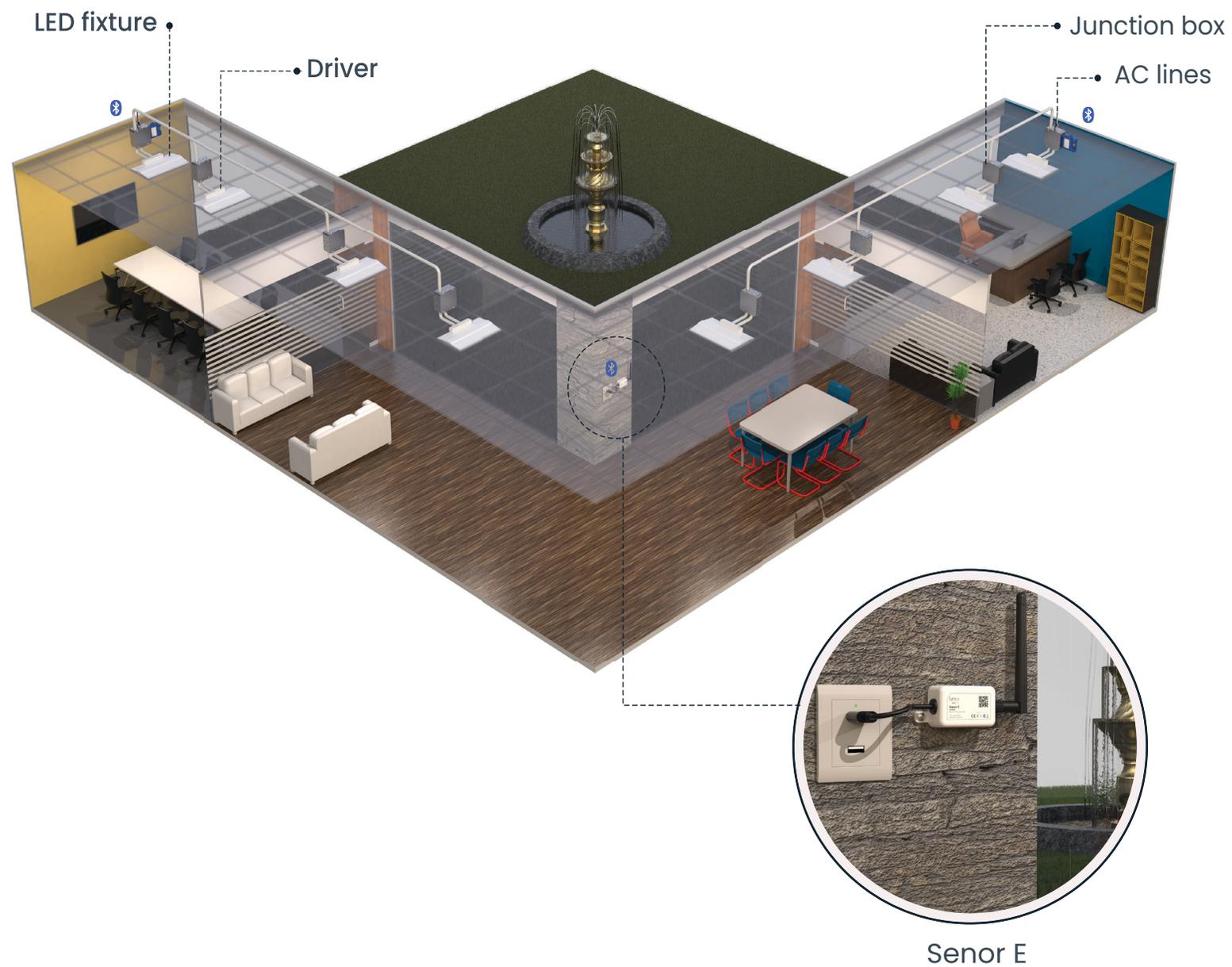
| Certifications | Details |
|----------------|---|
| CE | <p>IEC 62368-1:2014</p> <p>EMC test standards ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) EN 55032:2015/A11:2020 EN55035:2017+A11:2020</p> <p>Safety test standards IEC 62368-1:2014</p> <p>Radio test standard ETSI EN 300 328 V2.2.2 (2019-07)</p> <p>Health test standards: EN 62479:2010 EN 50663:2017</p> |
| RoHS 2.0 | RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU |
| REACH | Regulation (EC) No 1907/2006 of REACH |
| WEEE | Under the WEEE Directive: 2012/19/EU |
| Bluetooth | Declaration ID: D059551 |
| FCC | ID: 2AG4N-WLUNE |

Items included in the package box

- Senor E
- User manual
- Stick antenna
- Power Adapter
- Wall plugs
- Screws

Application

1. Senor E as range extender



Senor E

2. Senor E as beacon



Senor E

Ordering Information

| Product Code | Product Name | Product Description | Communication | Voltage Rating |
|--------------|--------------|---------------------------|---------------|----------------|
| WLUNE | Senor E | Beacon and Range Extender | BLE5.2 | 5V, USB type-A |

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