Cisco Smart+Connected City Multi-Sensor Core Node

The Cisco Smart+Connected City Multi-Sensor Core Node is an integral part of the Smart+Connected City Lighting Solution—an open architecture-based light-sensory network that can be deployed along with LED luminaires.

The City Multi-Sensor Core Node leverages standards-based 802.11 a/b/g/n wireless protocol data transports that support a variety of application-specific sensors to deliver multi-service capabilities at each retrofitted and new LED luminaire.
Features and Benefits

Main Features
- Multi-sensor wireless communication and control
- Controls power and light output of LED luminaire via LED driver and 0-10V dimming standard
- Measurement and reporting on electrical and sensor data
- Auxiliary power capability for additional devices

Measurement and Control
The City Multi-Sensor Core Node is connected to incoming AC mains and the LED driver. This direct connection provides on/off control and performance monitoring of the luminaire. Luminaire dimming control follows the 0-10VDC dimming standard. Power monitoring and measurement uses an onboard Energy Management integrated circuit.

An onboard microcontroller manages data communication, sensor control, fault management and status reporting.

Communication and Security
Communication to the device uses standard 802.11 a/b/g/n wireless communication protocols. It features highly-secure, certification-based authentication for every device using TLS 128-bit encryption.

Sensors
Onboard sensors include power and accelerometer sensors. The sensor module includes ambient light, passive infrared (PIR) motion sensor, and temperature sensors.

Antenna
Antenna kits provide a 5GHz, 2.4dBi antenna with QMA female connector interface, cable and mounting accessories.

Certifications
CSA damp-location rated and tested in accordance with UL 916 and CAN/CSA C22.2 No. 205-12. FCC 47 Part 15 modular approved device.
Dimensions

The following figures display the device dimensions (in millimeters).

Main Module

Sensor Module
Input and Output Interfaces
The following figure displays the device connections.

Note: Contact Sensy for recommended wiring diagram

Product Specifications

Table 1. Specifications

<table>
<thead>
<tr>
<th>Basic Specifications</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Input Voltage</td>
<td>120-277V</td>
</tr>
<tr>
<td>AC Output Voltage (Load and Aux)</td>
<td>Same as AC Input</td>
</tr>
<tr>
<td>Max AC Current (Total)</td>
<td>10A</td>
</tr>
<tr>
<td>AC Load Current Switching</td>
<td>Yes</td>
</tr>
<tr>
<td>AC Aux Current Switching</td>
<td>No</td>
</tr>
<tr>
<td>Surge protection</td>
<td>Approval pending for 3kV</td>
</tr>
<tr>
<td>Max power consumption</td>
<td>2.5W</td>
</tr>
<tr>
<td>Dimming Control Output</td>
<td>0-10VDC</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-30°C to 65°C</td>
</tr>
<tr>
<td>Enclosure Temperature</td>
<td>-30°C to 85°C</td>
</tr>
</tbody>
</table>
Warranty Information

For information on Sensity product and services, including warranty information or returns, please contact Sensity directly at:

Email: RMA@SENSITY.COM
Phone: (855) 500-SENS
Web: http://www.sensity.com

If a product must be returned for repair or replacement, you must obtain a Return Material Authorization (RMA) number from Sensity.

**Note:** Customer shall return the Product at Customer’s expense within 30 days of receiving instructions for return. Failure to follow the return instructions shall void warranty. Customer will package equipment in a manner that is (i) in accordance with good commercial practice, (ii) acceptable to common carriers for shipment at the lowest rate for the particular equipment, and (iii) adequate to ensure safe arrival of the equipment at the named destination.

Ordering Information

The following table lists the currently available Smart+Connected City Lighting Solution products.

**Table 2.** Ordering Information

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Multi-Sensor Core Node: Wi-Fi enabled, Lighting and environmental control - External mount</td>
<td>SC-S80-029-Ext-K9</td>
</tr>
<tr>
<td>City Multi-Sensor Core Node: Wi-Fi enabled, Lighting and environmental control</td>
<td>SC-S80-030-Int-K9</td>
</tr>
<tr>
<td>City Multi-Sensor Advanced Node: Wi-Fi enabled with 60GB SSD</td>
<td>SC-S90-033-MS-K9</td>
</tr>
<tr>
<td>City Multi-Sensor Advanced Node: Wi-Fi enabled with 128GB SSD</td>
<td>SC-S90-034-MS-K9</td>
</tr>
<tr>
<td>City Multi-Sensor Advanced Node: Wi-Fi enabled with 256GB SSD</td>
<td>SC-S90-030-MS-K9</td>
</tr>
<tr>
<td>Video sensor, 3.6 mm lens</td>
<td>SC-S90-018-CAM-K9</td>
</tr>
</tbody>
</table>

For More Information

For more information about the Cisco Smart+Connected City Lighting Solution, visit: http://www.cisco.com/go/smartconnectedlighting.