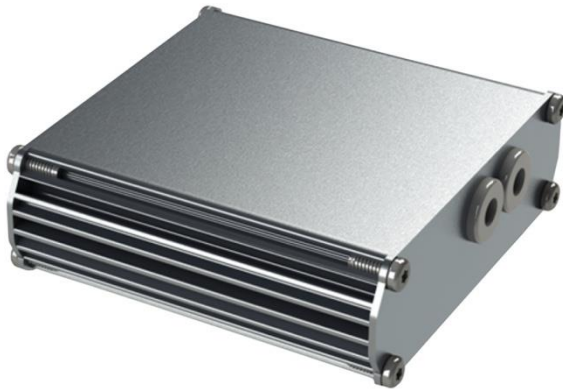


## Cisco Smart+Connected Core Node (Internal)



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

The 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.

The Core Node is offered in an internal (embedded) and externally mounted version. This document describes the internal version.

### 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
- Provides auxiliary power to additional devices
- Monitors status of LED luminaire and network

#### Measurement and Control

The 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) flush-mounted motion sensor, and temperature sensors.

## Antenna

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

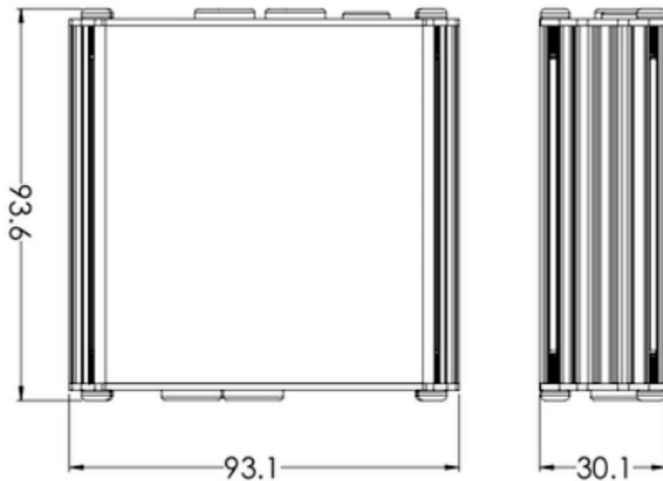
## Certifications

CSA damp-location rated and tested in accordance with UL 916 and CAN/CSA C22.2 No. 205-12.

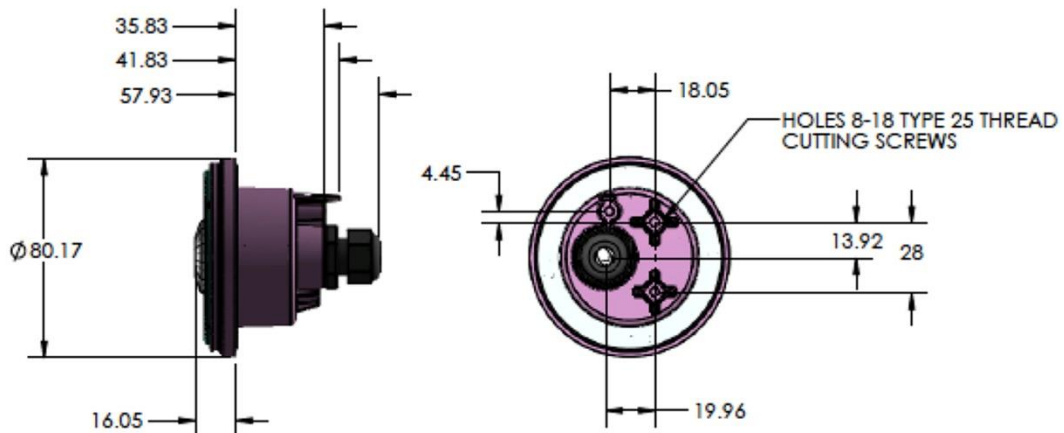
FCC 47 Part 15 modular approved device.

## Dimensions

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



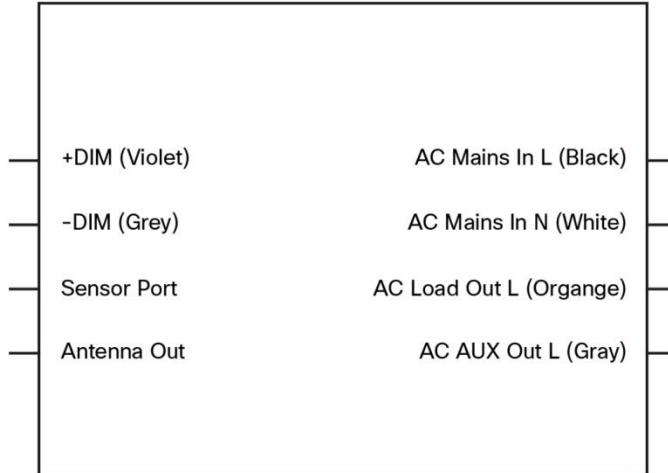
Main Module



Flush-Mounted Sensor Pod

## Input and Output Interfaces

The following figure displays the device connections.



Note: Contact Sensity for recommended wiring diagram

## Product Specifications

**Table 1.** Specifications

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

### Sensity Pod Specifications

Product Attribute	Sensor Pod Specification
On Board Sensor	Motion(PIR), ambient light, temperature
Motion Sensor Max. Mounting Height	40ft
Motion Sensor Beam Spread	1x mountingheight
Temperature Sensor Accuracy	+/-2°C
Operating Voltage	5v
Avg. Power Consumption	0.3W
Operating Temperature	-30°C to 55°C
Dimension	2.95" dia.
Mounting Method	Flush mount to luminaire

## Warranty Information

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

Email: [RMA@SENSITY.COM](mailto: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

Product Name	Part Number	Quantity in Bundle
<b>Core Node Internal</b>		
Core Node, Internal (WiFi, Internal Mount)	SCS80-029-CN-INT	1
Core Node, Internal (WiFi, Internal Mount) with Antenna and Connector Kit	SCS80-029-CN-INTK=	1
<b>Accessories</b>		
Antenna Kit for Core Node Internal	SCS80-042-AC-INTAK	1
Internal Core Node Connector Kit, 6 pin, 120-277V	SCS95-093-AC-INTCK	1

## Cisco Capital

### Financing to Help You Achieve Your Objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)

## For More Information

For more information about the Cisco Smart+Connected Lighting Solution, visit:

[http://www.cisco.com/web/strategy/smart\\_connected\\_communities/city-lighting.html](http://www.cisco.com/web/strategy/smart_connected_communities/city-lighting.html)



---

**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

 Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)