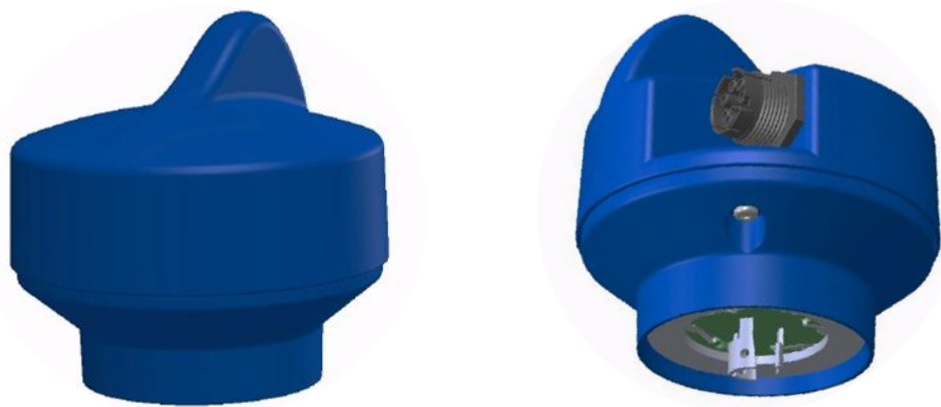


Cisco Smart+Connected City Multi-Sensor Core Node (External)



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 Core Node EX instantly converts any lighting manufacturer's LED fixture into IP-enabled sensory node in a light sensory network. This provides both lighting control and cloud-based IoT services via a standard NEMA socket.

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.

The Core Node is offered in an internal (embedded) and externally mounted version. The Core Node EX described in this document converts any 3rd party LED fixture with a NEMA socket into an advanced sensor node.

Features and Benefits

Main Features

- Multi-sensor wireless communication and control
- Directly mounts to the luminaire via existing NEMA photocontrol socket (In accordance with ANSI C136.41)
- Onboard GPS
- Controls power and light output of LED luminaire
- Measurement and reporting on electrical and sensor data
- Utility grade metering with 0.5% accuracy (In accordance with relevant sections of ANSI C12.20)
- Provides auxiliary power to additional devices
- Monitors status of LED luminaire and network
- Embedded antenna

Measurement and Control

The Core Node EX 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 0-10VDC dimming standard. Power monitoring and measurement is achieved by an onboard Energy Management IC.

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

Communication and Security

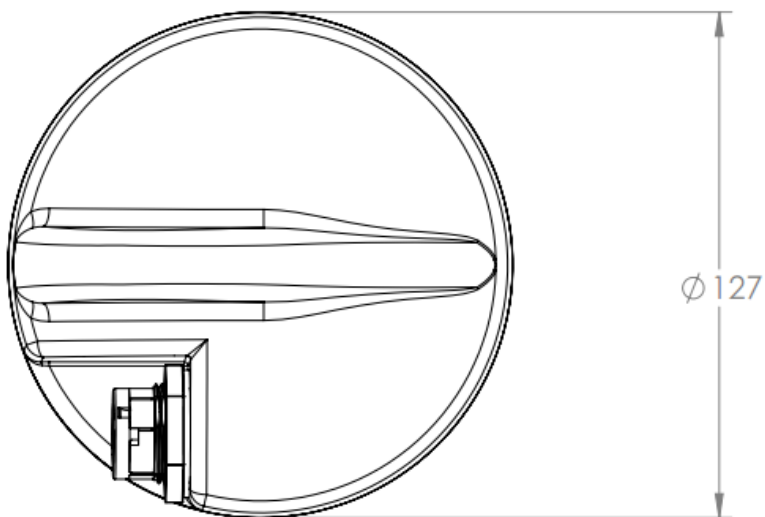
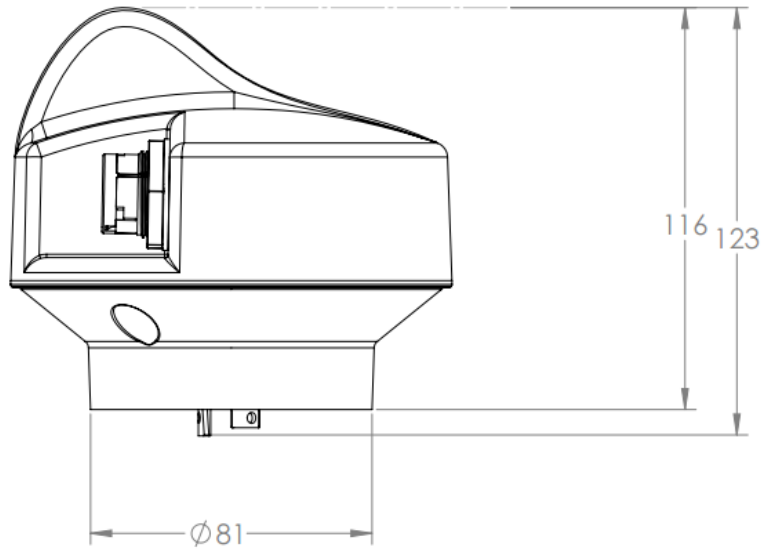
Communication to the device uses standard 802.11 a/b/g/n wireless communication protocols. It features highly-secure, certification-based authentication for every device using TLS 128-bit encryption.

Sensors

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

Dimensions

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



Product Specifications

Table 1. Specifications

Specifications	120-277V Configuration	480V Configuration
AC Input Voltage	120-277V	480V
AC Output Voltage (Load and Aux)	120-277V	480V
Typical Power Consumption (no Aux. load)	2W	2W
Max AC Current (Total)	10A	4A
Max AC Current to LED Luminaire	8A	2A
Max AC Current to Aux. Output	2A	2A
AC Load Current Switching	Yes	Yes
AC Aux Current Switching	Yes	Yes
Dimming Control Output	0-10VDC	0-10VDC
Weight	1.0lb	1.5lb
Dimensions	5.5" height x 5" diameter	5.5" height x 5" diameter
Color (In accordance with ANSI C136.41 specification)	Blue	Yellow
Operating Temperature	-30C to 55C	-30C to 55C

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

Product Name	Part Number	Quantity in Bundle
Core Node External		
Core Node EX, NEMA, WiFi, 120-277V	SCS90-062-CN-EXTA	1
Core Node EX, NEMA, WiFi, 480V	SCS90-063-CN-EXTW	1
Core Node External with Sensor Kit		
Core Node EX, NEMA, WiFi, 120-277V with Sensor Pod and Sensor Mounting Bracket	SCS90-062-CN-EXTAK	1
Core Node EX, NEMA, WiFi, 480V with Sensor Pod and Sensor Mounting Bracket	SCS90-063-CN-EXTWK	1
Core Node External Accessories		
Power Cable (North America), Core Node to External Sensor Pod, 4ft, 120-277V	SCS95-083-AC-ESPA=	1
Power Cable (North America), Core Node to External Sensor Pod, 4ft, 480V	SCS95-096-AC-ESPA=	1
Power Cable (ROW), Core Node to External Sensor Pod, 1.2m, 120-227V	SCS95-085-AC-ESPW=	1
Power Cable (North America), Core Node to External Sensor Pod, 2ft, 120-277V	SCS95-102-AC-ESPA=	1
Power Cable (North America), Core Node to External Sensor Pod, 2ft, 480V	SCS95-103-AC-ESPA=	1
Power Cable (ROW), Core Node to External Sensor Pod, 2ft, 120-227V	SCS95-104-AC-ESPW=	1
External Sensor Pod, Core Node EX	SCS90-064-AC-ESPN=	1
Mounting bracket, External Sensor Pod	SCS95-082-AC-ESPM=	1

For More Information

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

http://www.cisco.com/web/strategy/smart_connected_communities/city-lighting.html



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