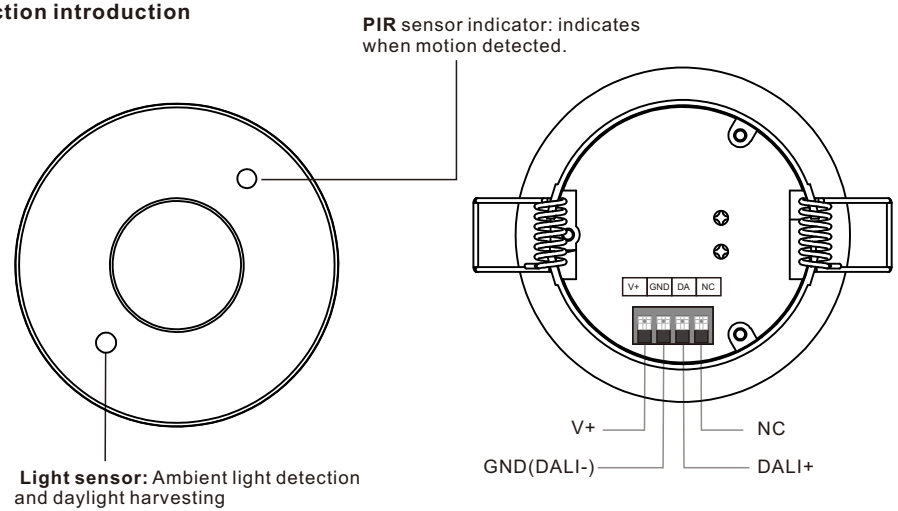
Casambi Wireless Ceiling Mounted PIR Sensor + Light Sensor + DALI Dimming

SUNRICHER

Important: *Read All Instructions Prior to Installation*

Function introduction



Product Description

The ceiling mounted sensor combines presence sensing, daylight harvesting, DALI dimming and Casambi radio technology. The sensor can work with DALI LED drivers or luminaires, the luminaires just need to be connected to mains power. The result is increased occupant comfort and significant energy savings that meet the most demanding building energy codes. The sensor is suitable for low bay applications which need sensor based automation.

Casambi Technology Explained

The Casambi technology provides a mesh network where all the intelligence of the system is replicated in every node and, in such a way, creates a system with no single point of failure. In this kind of fully distributed architecture, any unit can go offline and catch up from others when they return back online.

Wireless Features

• Control a large number of fixtures from any point
• Simple to use UI
• Wide range of functionality – Grouping Luminaires, different lighting situations for different occasions, colour temperature, daylight sensor, occupancy sensor and much more.

Product Data

Physical Information

Dimensions / Weight	See Dimensions
Cutting Hole	70-73mm
Material / Color	ABS / White
Wire Gauge	26-16 AWG (0.2-1.3 mm2)
Strip Length	0.28-0.35 in. / 7-9 mm

Electrical Information

Power Supply	12-24VDC
Current Consumption	< 20mA
Dimming Control	DALI
DALI Control Mode	Broadcast
Status Indicators	Red (motion detection)

Wireless Communication

Transceiver Frequency	2.4GHz ISM band
Radio Range	164 feet (50m) in open field
Radio Certification	FCC/IC, CE

Lighting Control

Features	DALI broadcast, Individual/group addressing, Scene control Autonomous sensor-based control, Scheduler control

Sensing

Occupancy Sensing Type	PIR sensor
Lux Detection Range	0-1000 Lux
Mounting Height	Recommended height: 8ft (2.5m)
Detection Angle	130°
Detection Range	Up to 5 meters @ 2.5m installation height

Environment

Operating Temperature Range	32˚F to 104˚F / 0˚C to 40˚C (indoor use only)
Operating Humidity	0-95% (non condensing)
Safety Certification	cULus Listed, CE

Key Features

• PIR motion detection
• Daylight harvesting
• Works with DALI drivers or luminaires, broadcast control
• Autonomous sensor-based control
• Can be use for indoor applications

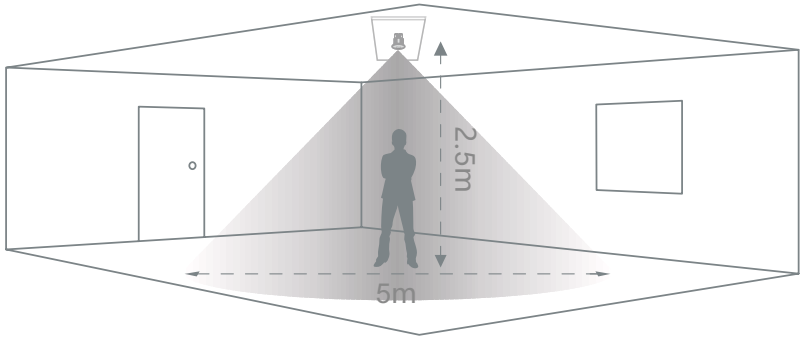
Applications

• Open offices
• Individual offices
• Conference rooms
• Classrooms
• Retail stores
• Hospitals
• Lobbies

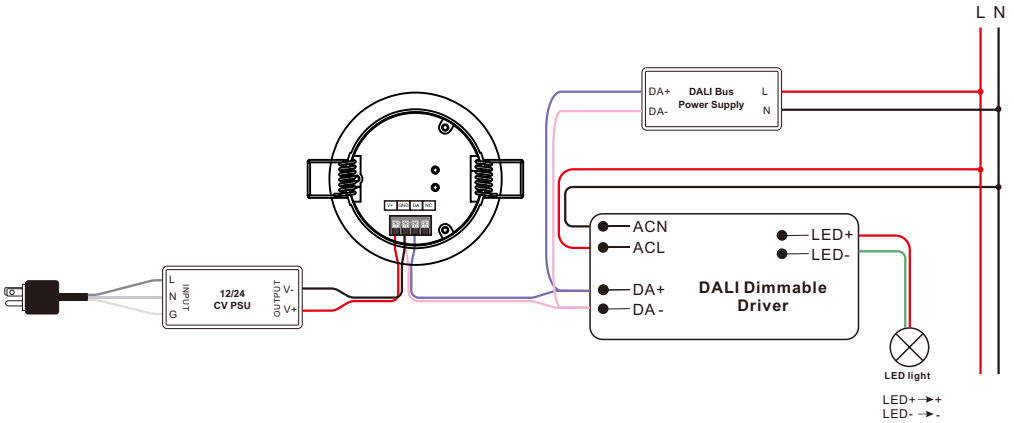
Benefits

• Cost-effective solution for energy savings
• Energy code compliance
• Robust mesh network

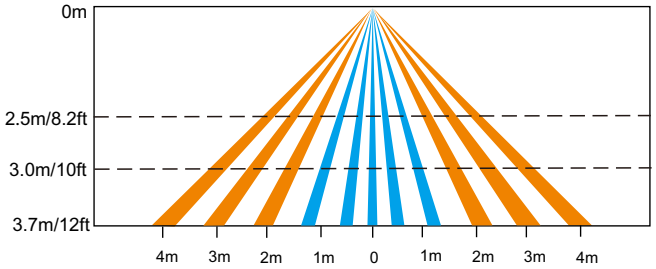
Detection Pattern



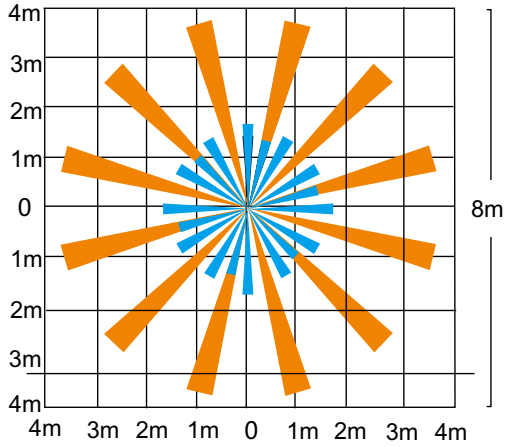
Wiring Diagram



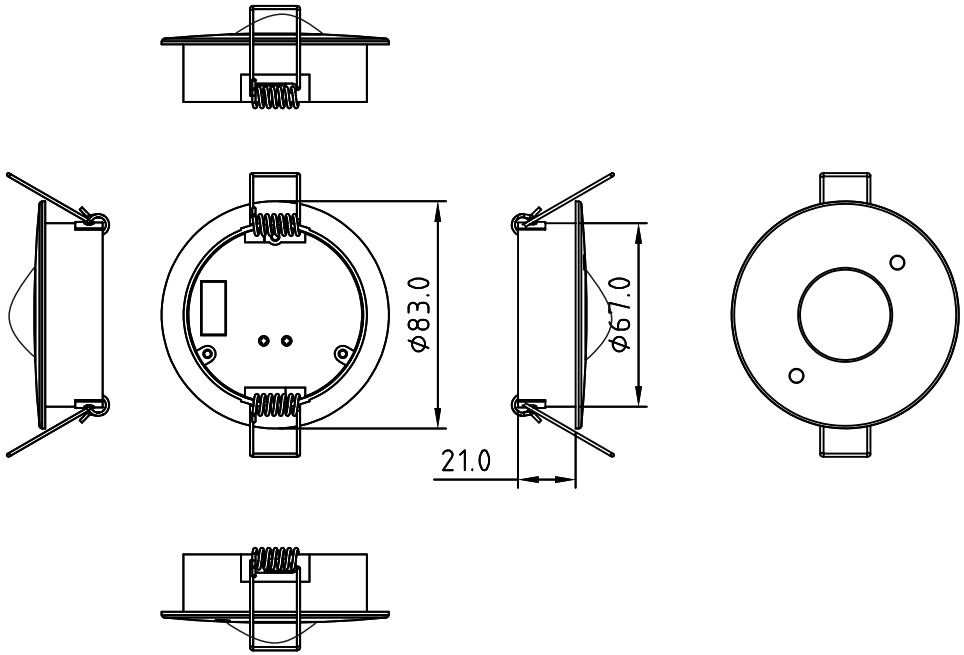
Coverage Side View



Coverage Top View



Product Dimension



The detection area for movement sensor can be roughly divided into two parts:

- Slow movement (person moving < 1.0'/s or 0.3m/s)
- Quick movement (person moving > 1.3'/s or 0.4m/s)