Casambi Wireless IP65 ZHAGA 18 PIR Sensor + Light Sensor + DALI Dimming

Bluetooth® c(UL)us LISTED CE UK CA ICFC RoHS COMPLIANT CASAMBI
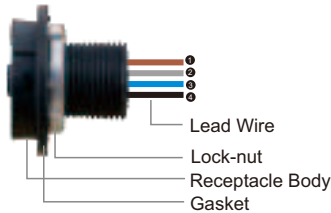
Important: *Read All Instructions Prior to Installation*

Function introduction
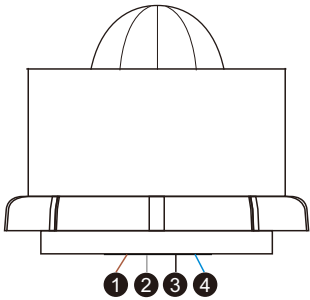
Zhaga Receptacle Accessory(optional for order)

❶ Port 1 (Brown): VCC(12-24V)
❷ Port 2 (Gray): GND/ DA- (DALI signal)

❸ Port 3 (Blue): No connection
❹ Port 4 (Black): DA+ (DALI signal)

Lead Wire
Lock-nut
Receptacle Body
Gasket

Product Description

The IP65 motion 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.

Key Features
• PIR motion detection
• Daylight harvesting
• Works with DALI drivers or luminaires, broadcast control
• Autonomous sensor-based control
• Can be use for outdoor applications
• ZHAGA Book 18 socket

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

Applications
• Warehouses
• Factories
• Street and Area Lighting
• Outdoor Luminaires - Wall Packs - Parking Lots - Walkways
• Photo Controls
• Central Management System

Product Data

Electrical Information

Power Supply	12-24VDC
Power Consumption	Max. 30mA
Control	DALI-2
Marking Terminals	V+,DA-, DA+
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

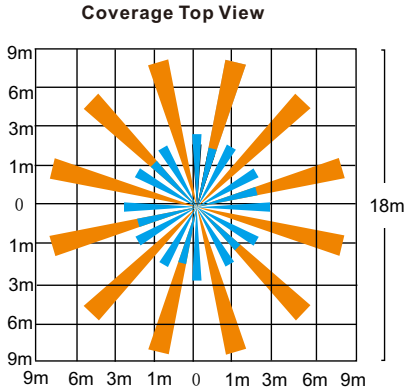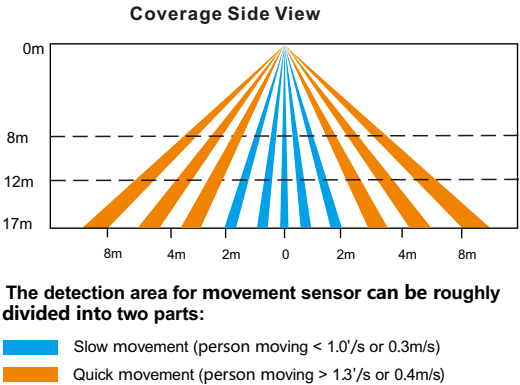|	
Features	DALI broadcast, Individual/group addressing, Scene control Autonomous sensor-based control, Scheduler control

Sensing

Occupancy Sensing Type	PIR sensor
Lux Detection Range	0-1000 Lux
Mounting Height	Up to 17m, recommended height: 12-15m
Detection Angle/Range	360° (ceiling)/18m(diameter)

Environment

Operating Temperature Range	-20℃ to 40℃
Operating Humidity	0-95% (non condensing)
Safety Certification	cULus Listed, CE

Detection Pattern

Coverage Side View

Coverage Top View

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

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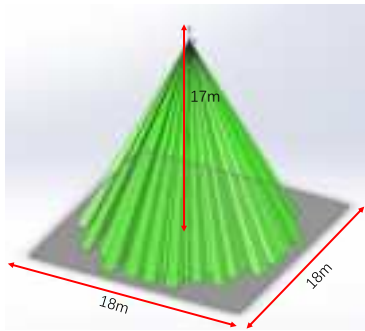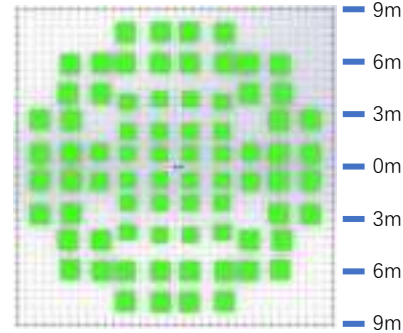
■ Quick movement (person moving > 1.3'/s or 0.4m/s)

Detection Area

Note:
1) Following different detection areas are based on different installation heights & patterns.
2) Detection Pattern is a relevant value, the performance should depends on the site conditions (installation height/ temperature/ sunlight/ humidity/ Blind area…etc)

Detection pattern at 17m height
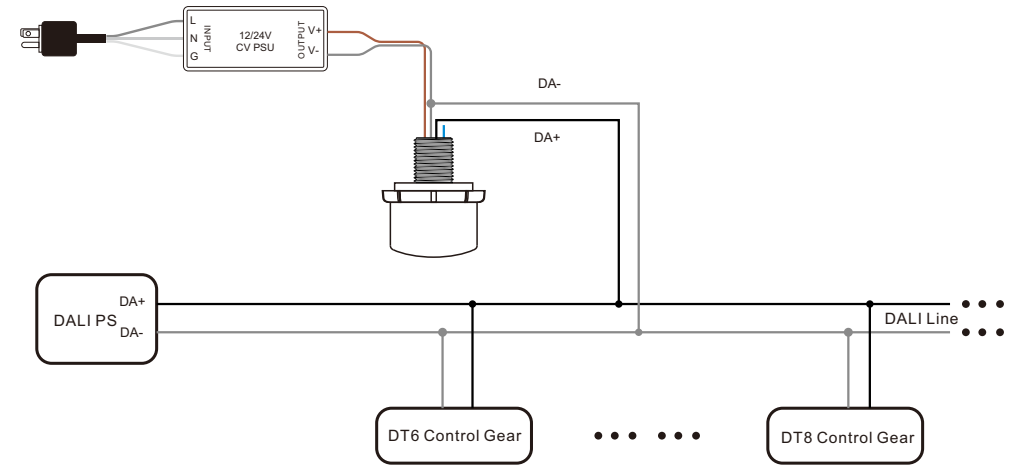

Detection pattern at 17m height
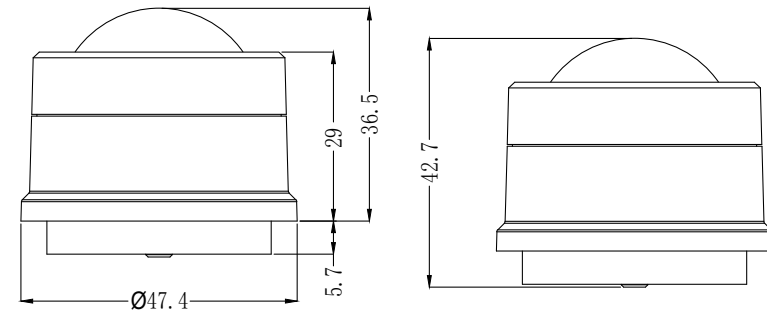
Application

Indoor Low/High-bay Application

Outdoor Application

Wiring Diagram

Note: please make sure the polarity of DALI signal of the sensor is correctly connected.

Product Dimension

Installation Precautions

- Avoid areas with frequent temperature changes: Keep away from air conditioners, fans, refrigerators, ovens, and other objects that cause rapid temperature changes. The detection effectiveness of PIR motion sensors is closely related to temperature fluctuations, and vents or heat sources can lead to false alarms.
- Avoid areas with significant air flow.
- Avoid facing glass doors and windows directly: 1) Do not face glass doors and windows directly to avoid interference from strong light. 2) Avoid complex environments outside doors and windows, such as direct sunlight, crowds, and moving vehicles.
- Avoid installing opposite large, constantly moving objects: Large objects with significant motion can cause sudden changes in airflow within the detection area, leading to false alarms. Outdoor PIR motion sensors should not be installed opposite large trees or tall bushes.
- Avoid areas with screens, furniture, large potted plants, or other obstacles within the detection range.
- Avoid areas exposed to direct sunlight.