GRYDSENSE AGGREGATOR

TECHNICAL SPECIFICATION

Revision History

SI#	Change Description	Version	Date
1	Initial Draft	0.6	21st Oct, 2021
2	Added Compliance statements	2.0	22 nd Dec, 2022
3	Added Mounting Arrangement	3.0	10 th April, 2024



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Overview

GrydSense Wireless aggregator is PoE powered transceiver that receive information from Wireless devices and transmits them to the gateway via Wired Ethernet Network. The wireless aggregator can receive data from 150 connected devices.

Features

- Simple and Secure Zero touch commission
- Up to 30 meters indoor range
- Configurable from anywhere via cloud interface
- Multiple ceiling mount options available

Power/Performance

- Operating voltage: PoE
- Non-volatile memory for up to 30 days

Standards Approval

CE and FCC Certified

Models Available

GRYD-AG-POE - Aggregator with POE power supply

Environment

Temperature: 0°C to 50°C

For indoor use only

Material and Colour

Material: Polycarbonate

Colour: Roma white

Terminals & Wires

Power: POE for power and data

Cable: CAT 6



Technical Specification

Radio

BLE Mesh

Supported Standards and Modulation Techniques

802.15.5 - GFSK / 1Mbps

Antenna - ANT3216LL00R2400A

Antenna Gain - 5.05 dBiExpected Indoor Range - 30 meter

Wi-Fi

• Supported Standards and Modulation Techniques

• 802.11b - CCK (DSSS)

• 802.11g- OFDM

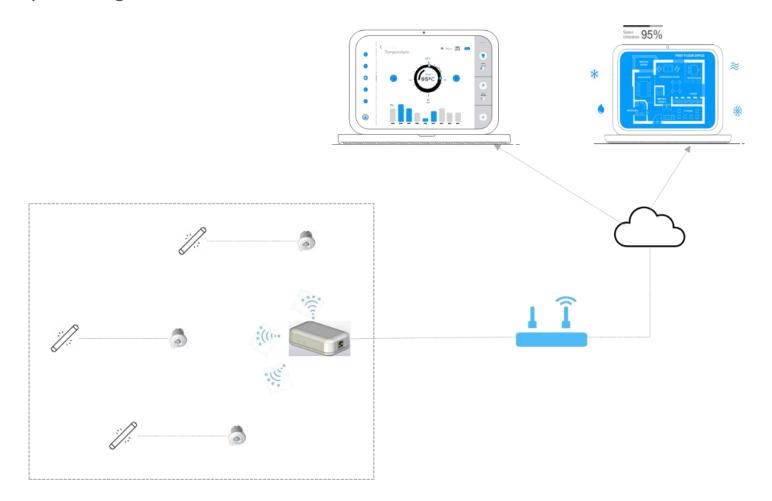
802.11n - OFDM

Antenna - 1461530050 (Molex)

Antenna Gain - 3.2dBiExpected Indoor Range - 45 meter



System Diagram



LED Indications

The product has three LED (Red and Greed) indicating various Lighting states of the product and the functions the sensors is performing. The following table summarises the system and LED state,

LED	Description
Red led blink only once	PIR detected some movement
green led blinks, after that red blink 5 times	Indicates seconds count for magnetic configuration change



FCC ID: 2A6VEGRYDAGM

Compliance Statements

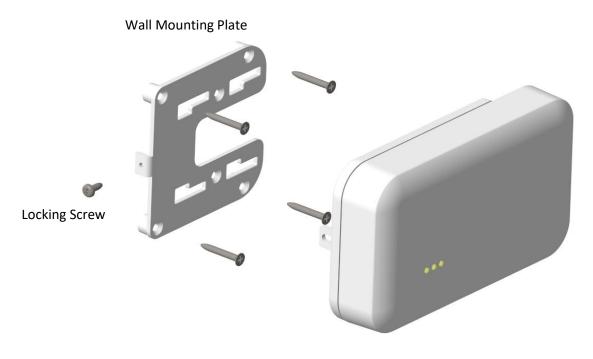
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including, an interference that may cause undesired operation.

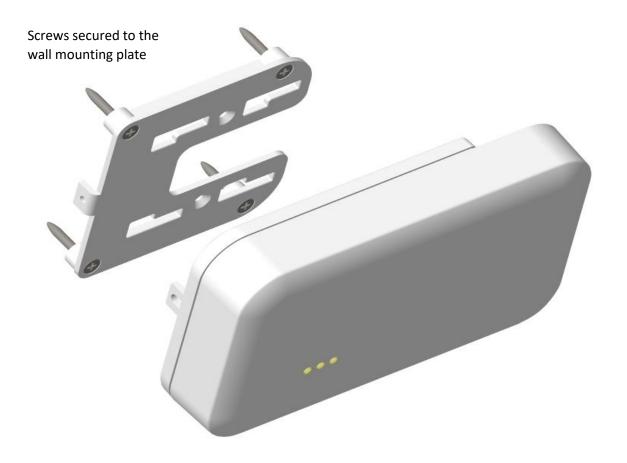
Caution Statements

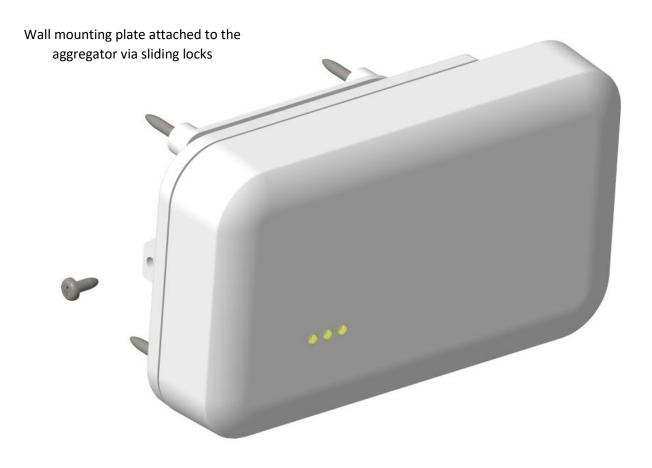
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Mounting Arrangement













Locking screw securing the whole setup

Information to the User

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.