
























CogniPoint PG1

Installation Manual

Version 7.0



june 2017

package content

QTY	product	Model number	*	Certs and symbols		
X units	PG 1 sensor module	#####		 	FCC ID: #####	 
X units	flat ceiling adaptor	#####	*	 		 
X units	Dropped ceiling adaptor	#####	**	 		 
X units	Detachable mounting plate	#####		 		 
X units	A1 powerline AC module (insert module)			 	 INPUT: 100-240 V~, 0.4A, 50/60Hz, 10W.	 
X units	Accessory A					
X units	Accessory B					

*

Warning!!

- Work on the AC supply system may only be performed by specialist staff! De-energize mains power supply prior to installation and/or disassembly! Failure to observe installation and operating instructions may result in fire and other hazards!
 - 1. In order to ensure the safe and correct installation and use of this product and to prevent personal injury and property damage, please read following contents carefully before installation and use of this product.
 - 2. The all-pole mains switch and all-pole circuit breaker are not provided with the apparatus, the installation shall be carried out in accordance with all applicable installation rules.
 - 3. WARNING: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instruction.
 - 4. WARNING: MOUNTING WORK SHOULD BE PERFORMED BY INSTALLING PROFESSIONALS ONLY
 - 5. Do not attempt to open any cover.
 - 6. A readily accessible disconnect device shall be incorporated external to the equipment;
 - 7. Do not expose this apparatus in rain, damp or place near water
 - 8. Do not expose this apparatus to direct sunlight and other sources of heat.
 - 9. Normal operating temperature is 0 ~ 35°C
 - 10.  This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.
 - 11.  Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.
 - 12. This equipment mounting height should be between 2.5 and 3.5m, only access can only be gained by SERVICE PERSONS or by USERS who have been instructed about the reasons for the restrictions applied to the location and about any precautions.
 - 13. Since there is no overcurrent protection device in the product, the maximum value of overcurrent protection devices provided outside the equipment shall be 16A.

- **This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.**
- **Contains FCC ID: W7OMRF24J40MDME**
- **Contains transmitter module IC: 7693A-24J40MDME**
- The Federal Communications Commission warns that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

Warranty

1 CogniPoint PG1 overview

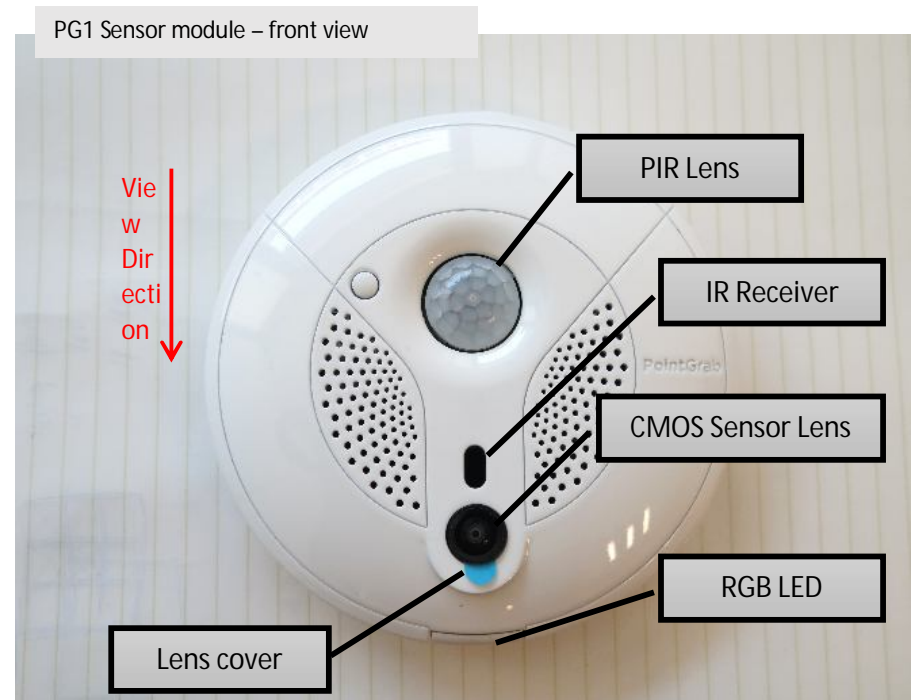
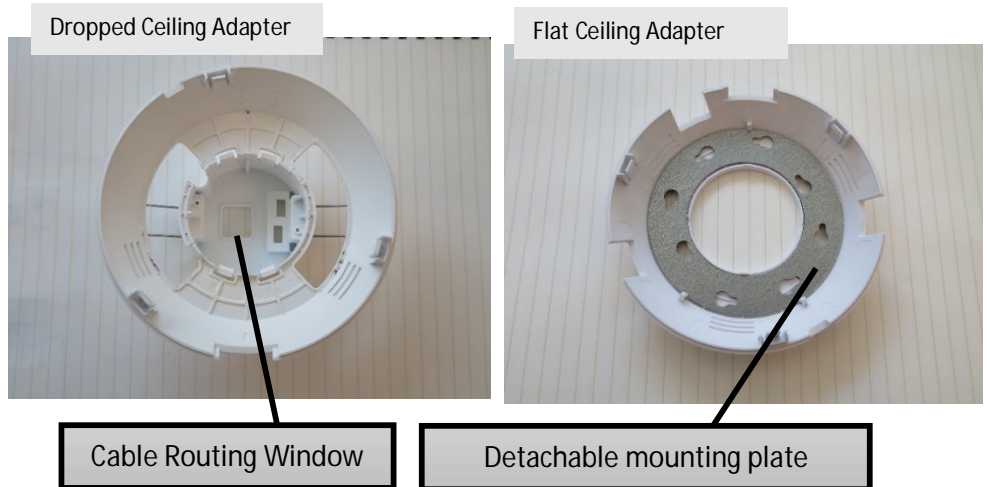
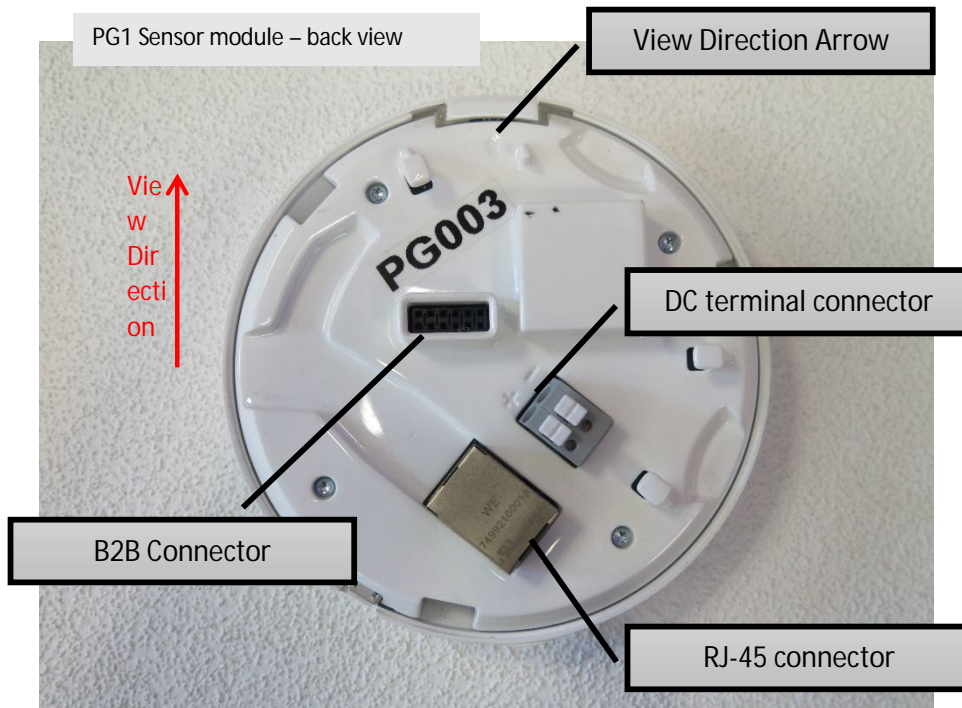
CogniPoint™ PG1 is an innovative sensor for smart buildings. PG1 utilizes computer vision algorithms, to generate analytics and data that enable a more efficient, comfortable and cost effective building environment, by providing notifications, alerts and analytics to building management and control systems.

1.1 Components identification

The CogniPoint PG1 installation kit contains the following parts:

- PG1 sensor module
- Dropped Ceiling Adapter
- Flat Ceiling Adapter (with attached metal mounting plate)

1.2 Connectors

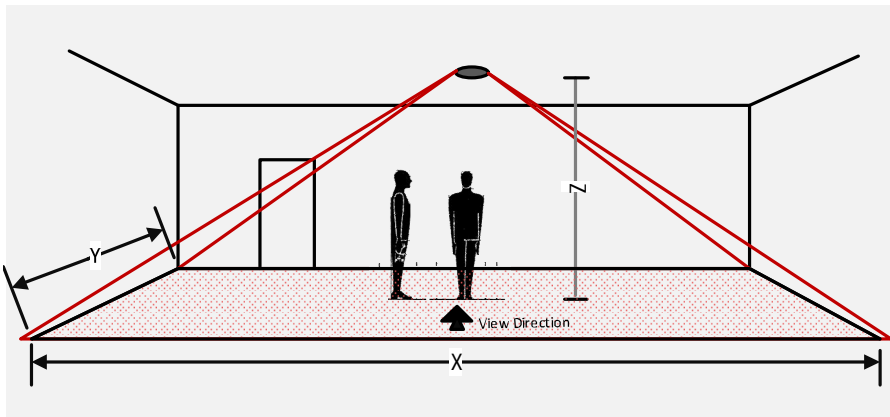


2 Installation Position and Detection Area

PG1 is a ceiling mounted device. For optimal performance, the PG1 mounting height should be between 2.5 and 3.5m.

The PG1 detection area is a rectangle with dimensions that vary according to the mounting height. The unit viewing direction is defined as the positive Y axis direction of the detection area rectangle (see drawing below). There is a view direction marker on the back of the sensor module and on the inside of the adapters.

Mounting Height (Z)	Z=2.5m	Z>=3m
Detection Area	X=6m Y=4.5m	X=8m Y=6m



CogniPoint PG1 detection area example with viewing direction marker

When selecting an installation position and direction, and make sure that it covers the area of interest.

3 Connections

3.1 Power

PG1 supports the following power options:

Power Option	Connector/Cable Type	Power Rating
12V-24V DC input	2x Terminal Connector, 12-22AWG (Recommended wire gauge 1.5 mm ² /15AWG)	5W Maximum (12V/0.5A)
PoE	RJ-45 (Use Cat 5e or better cable)	Conforms with 802.3af Class 2
A1 powerline AC module	2x Terminal Connector, 12-22AWG (Recommended wire gauge 1.5 mm ² /15AWG)	100-240V ~ 0.4A 50/60Hz

3.2 Networking Connectivity

PG1 supports the following network connectivity options. The network connectivity option is independent of the power option.

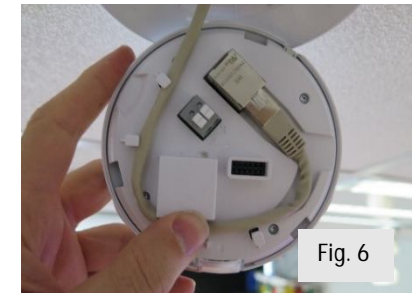
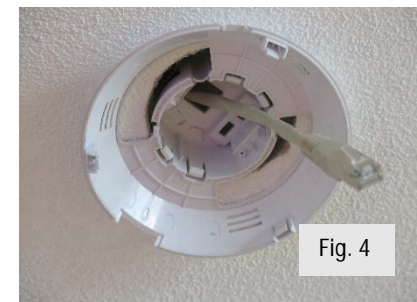
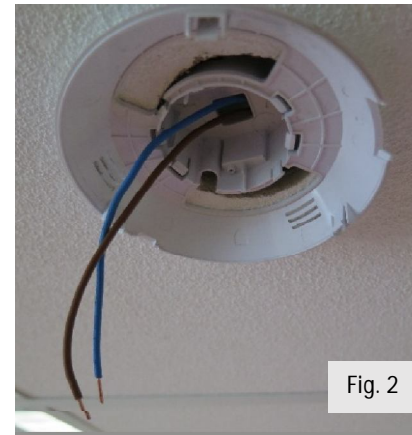
Network Option	Connector/Cable Type	Specification
WiFi	N/A	802.11
Ethernet	RJ-45 (Use Cat 5e or better cable)	100BASE-TX

4 PG1 sensor module installation (DC or PoE power source) - Dropped (drywall) ceiling

The recommended installation in dropped ceiling is using the dropped ceiling adapter. The adapter requires drilling of a $\Phi 64\text{mm}$ circular opening in the ceiling tile.

Installation steps

1. Drill a 64mm opening in the required position in the ceiling
2. Make sure the power is disconnected. Route the DC power wires or Ethernet cable through the ceiling opening (Fig.1)
3. Bring the power wires (Fig.2) or Ethernet cable (Fig.4) through the adapter top opening.
4. Mount the adapter into the ceiling opening, using the spring flaps. Check the view direction arrow is pointing in the desired direction (Fig.2)
5. Connect the PG1 device:
 - a. If connecting a DC input, connect the two wires to the corresponding DC wire terminals. Check polarity is correct (Fig.5)
 - b. If connecting PoE or Ethernet, Connect the RJ-45 plug, and route the Ethernet cable through the cable lead clips (Fig.6)
6. Attach the sensor module to the Dropped Ceiling adapter (Fig.7). Make sure the device is secured to the adapter.
7. If present, remove the lens cover.



5 PG1 sensor module installation (DC or PoE power source) - Structural ceiling

The recommended installation in a structural ceiling (for e.g. concrete) is using the flat ceiling adapter.

This installation method may also be used in a dropped ceiling when drilling of the 64mm hole is not desirable.

The flat ceiling adapter attaches using wall plugs (recommended 6mm plugs). Installation steps:

1. Secure the Flat ceiling adapter to the ceiling using two wall plugs and screws (Fig.1). When marking screws position, note the view direction arrow marker on the adapter and check it aligns with the required view direction (small adjustments can be made by rotating the adapter relatively to the metal plate, before tightening the screws).
2. Route the PoE or DC power wires. The wiring can be routed into the ceiling (Fig.2) or in parallel to the ceiling through the adapter side openings (Fig.4).
3. Connect the power wires to the sensor module (See previous page for details).
4. Attach the sensor module to the adapter (Fig.3). Make sure the device is secured to the adapter.
5. If present, remove the lens cover.

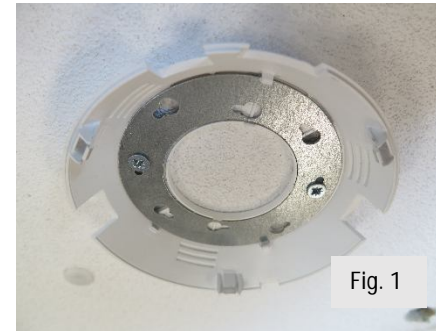


Fig. 1

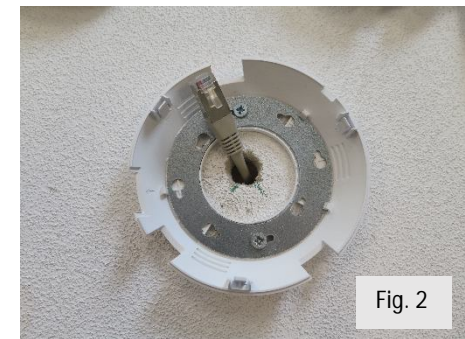


Fig. 2

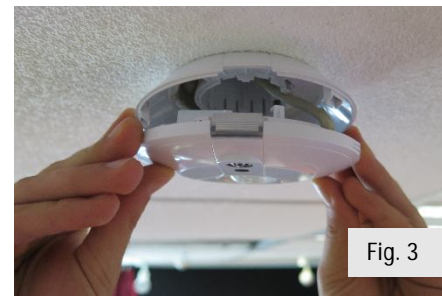


Fig. 3



Fig. 4

6 Installation using the optional A1 powerline adapter (100-240V AC)

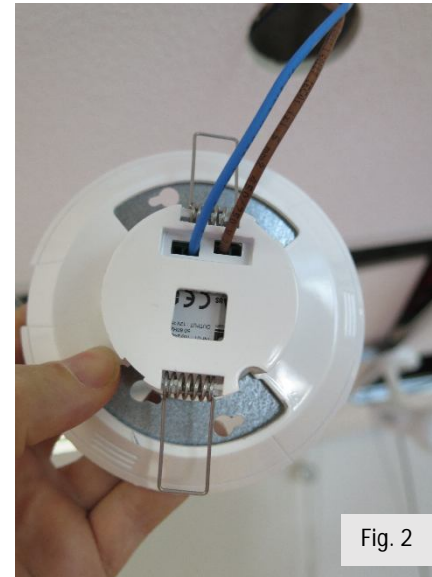
Safety Warning: Work on the AC supply system may only be performed by specialist staff! De-energize mains power supply prior to installation and/or disassembly! Failure to observe installation and operating instructions may result in fire and other hazards!

The optional A1 adapter can be used to connect the sensor to 100-240VAC 50/60HZ power source. The A1 adapter mounting is similar to the dropped wall adapter and requires drilling of a 64mm opening in the ceiling.

Note: An Ethernet cable can be connected in this configuration by removing the metal mounting plate and routing the cable through one of the side openings.

Installation steps:

1. Drill a 64mm opening in the required position in the ceiling
2. Make sure the power is disconnected. Connect the AC power wires to the AC terminals (Fig.2)
3. Mount the adapter into the ceiling opening, using the spring flaps. Check the view direction arrow is pointing in the desired direction (Fig.3 and Fig.4)
4. Attach the sensor module to the adapter (Fig.5). Make sure the device is secured to the adapter.
5. If present, remove the lens cover.

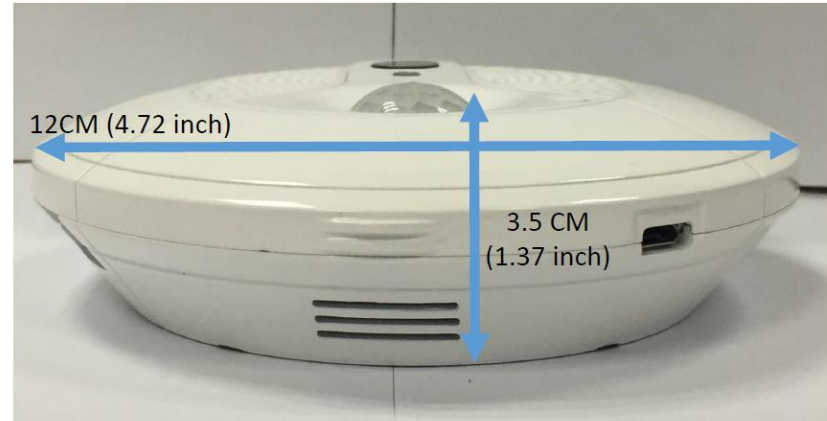


7 CogniPoint Measurements

Front View



Side View



Back View With a Flat Adapter

