FA206C Ceiling-mount PIR Detector

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BOSCH
Invented for life

- Ceiling mount up to 5.5 m (18 ft)
- Reliable communication through 900 MHz spread spectrum technology with frequency hopping
- False alarm reduction through 56 bit communication protocol and advanced signal processing
- Fully supervised with transmitter check-in once per minute

The FA206C is a wireless, ceiling-mounted, four--element passive infrared (PIR) detector that uses a pyrosensor array to detect intruders. Microcontroller PIR signal analysis with special ASIC (application specific integrated circuit) technology for PIR pulse processing reduces sensitivity to radio frequency interference (RFI), vibration, static electricity, lightning, ambient temperature changes, and other common causes of false alarms.

Functions

Communication Reliability
Using a bandwidth of at least 10 MHz in the 900 MHz range with a frequency hopping technique that sends redundant messages across that bandwidth reduces interference and provides a greater range for more reliable communication. The shorter wavelength at 900 MHz allows signals to pass through narrow openings in both commercial and residential environments. The higher transmission power allowed by the Federal Communications Commission (FCC) for 900 MHz spread spectrum systems results in a longer open-field range than traditional 300 MHz products.

False Alarm Reduction
The 56 bit communication protocol eliminates lost or incorrectly decoded signals due to radio interference.

Self-Testing
Once a minute the fully supervised transmitter sends signals to the receiver to test the system for low battery, tamper, and inactive status.

Certifications and approvals

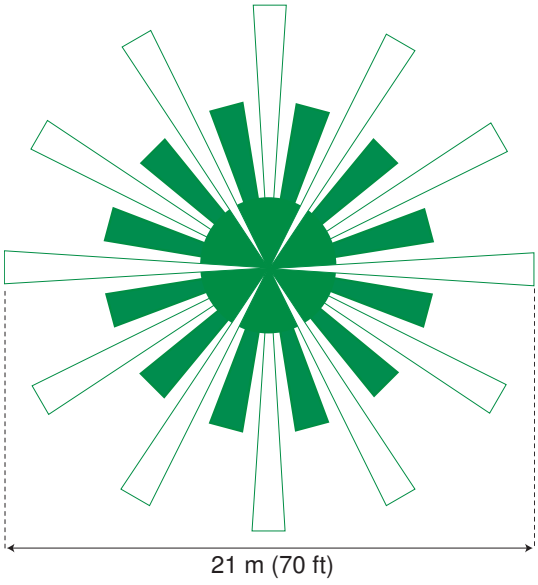
Complies with:	FCC Part 15

Installation/configuration notes

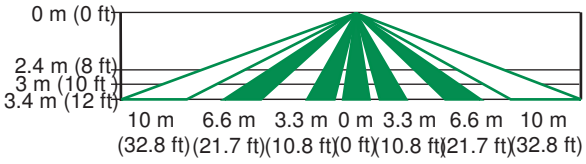
Compatibility Information

Control Panels	D9412GV2, D7412GV2, and D7212GV2
	D9412G, D7412G, v6.30 or higher
	D7212G, v6.41 or higher
Receivers	FA400, FA404R, FA416R, and FA422, when used with Bosch control panels.

Standard Coverage



Top View Broad: 21 m x 360° (70 ft x 360°)



Side View Broad: 21 m x 360° (70 ft x 360°)

Mounting Considerations

The FA206C can be mounted on ceilings up to 5.5 m (18 ft) high; however, as mounting height increases the distance between detection zones also increases towards the perimeter, and the effects of factors such as floor surface temperature and intruder direction and speed intensify. The following table gives the approximate effective detection diameter for various mounting heights, but walk test every installation to ensure appropriate coverage.

Mounting Height	Effective Detection Diameter
2.4 m (8 ft)	9.3 m (11 ft)
3 m (10 ft)	11.7 m (38 ft)
3.6 m (12 ft)	14 m (46 ft)
5.5 m (18 ft)	21 m (70 ft)

Parts included

Quantity	Component
1	PIR detector
1	Hardware pack
1	Literature pack

Technical specifications

Electrical

Batteries (Replacement):	Duracell® 123A
Voltage (Operating):	2.5 VDC to 3.3 VDC provided by an internal 3 V battery

Mechanical

Dimensions (height x diameter):	5.7 cm x 13.1 cm (2.25 in. x 5.2 in.)
Weight:	185 g (6.5 oz)
Alarm Output Lockout Time:	90 sec
Alarm Output Relay:	One normally-closed (NC)
Alarm Output Period:	2 ± 1 sec
Tamper Switch:	One normally-closed (NC); opens when cover is removed
Warm-up Period:	1 minute

Environmental

Relative Humidity:	10% to 90% non-condensing
Temperature (Operating):	0°C to +49°C (+32°F to +120°F)
Radio Frequency Interference (RFI) Immunity:	No alarm or setup on critical frequencies in the range of 10 MHz to 1 GHz for field strengths less than 30 V/m

Trademarks

Duracell® is a trademark owned or used by The Gillette Company or its affiliates.

Ordering information

FA206C Ceiling-mount PIR Detector
Wireless, ceiling-mounted, passive infrared detector
Order number **FA206C**

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