BOSCH

RADION glassbreak

RADION wireless security solution from Bosch provides the range, scalability and exceptional battery life required to ensure reliable performance and superior quality. Advanced diagnostics and multiple device enrollment options make installation and maintenance simple and cost effective. With a complete line of peripherals, RADION provides the flexibility for virtually any application requirement.

System overview

RADION glassbreak is a wireless sensor that detects breaking glass. It is equipped with a tamper switch and factory preset glass break sensitivity settings providing flexible configuration to maximize false alarm immunity and catch performance in any environment.

Functions

Dual Acoustic Technology
When an object hits a pane of glass, the glass absorbs the blow and emits a low frequency sound pressure wave, called the flex wave. When the force of the blow is too great, glass shatters and emits a high frequency audio signal. A bell ringing, or a vase breaking produces a similar audio signal, but does not produce a flex wave. The glassbreak detects the flex wave first, and the audio signal second, reducing false alarms from items that only emit high frequency audio signals.

▶ Dual frequency acoustic based detection technology

▶ Sliding, self-locking enclosure for ease of installation

▶ Operational up to 5 years using a single user replaceable CR123A lithium battery

▶ Supervised for low-battery, cover-tamper, and removal from mounting surface tamper conditions

The glassbreak detects breaking plate, tempered, wired, and laminated glass up to 6.4 mm (0.25 in) thick through blinds and lightweight, unlined drapes. The omni-directional microphone contained within the glassbreak can detect an audio signal in a 360 degree radius, allowing for supurb, acoustic detection and monitoring.

Glass Break Sensitivity
Factory-set sensitivity levels allow the detector to suit any environment.

Tamper Switches
The glassbreak has a wall and cover tamper switch that transmits a tamper signal when someone removes the device from its base, or pulls it away from the wall.

Self-locking Enclosure
The sliding self-locking enclosure has an integrated bubble level to make installation easier.

Regulatory information

Region	Regulatory compliance/quality marks	
Europe	CE	EMC, LVD, R&TTE,RoHS [RFGB]
USA	FCC	Part 15 Security/Remote Control Transmitter 433.42 MHZ
Canada	IC	1249A-RWSSFT
China	CCC	2013031901000078 [RFGB-CHI]

Region	Regulatory compliance/quality marks	
Brazil	ANATEL	3566-13-1855 [RFGB-A]
Russia	GOST	TC N RU Д-NL.MH09.B.00334 EAC

Installation/configuration notes

ⓘ **Notice**

Glass break detectors are intended only as a component of a perimeter protection system. They should always be used in conjunction with motion sensors.

Mounting considerations
Mount the detector on interior walls or ceilings where it is protected from weather elements such as extreme temperatures, humidity, rain, or snow. For the best performance, mount the detector within clear view of the glass and within 6 m (20 ft) of the glass.

Wall mounting
The best location for mounting the device is on the opposite wall, within the sensor's range and line of sight. Ceiling and adjoining side walls are also suitable locations for mounting.

Ceiling mounting
Mounting of the detector can occur in a variety of ceiling types in which a direct line of sight of the protected window is achieved. However, because the direction of sound travels out from the broken glass of a window, the desired location of the detector should be at 2 to 3 m (6 to 10 ft) into the room for optimal detection.
Do not mount the detector:
- In a corner
- In rooms with loud equipment such as air compressors, bells, and power tools, or a lot of ambient (white) noise
- In rooms with sound deadening drapes, curtains, shades, blinds, or wooden window shutters
- On the same wall as the glass
- On free-standing posts or pillars
- In humid rooms
- In rooms smaller than 3 m x 3 m (10 ft x 10 ft)
- In rooms with multiple noise sources

ⓘ **Notice**

Installation on metal surfaces can affect the RF propagation pattern of the radio transceiver.

Technical specifications

Properties

Dimensions:	101.42 mm x 112.90 mm x 35 mm (3.99 in x 4.44 in x 1.38 in)

Power

Power/Voltage:	3 VDC
Battery type:	One CR123A Lithium battery
Battery life:	Up to 5 years

Acoustic capabilities

Glass types and thickness:	Type	Thickness
	Plate	2.4 mm to 6.4 mm (3/32 in to 1/4 in)
	Tempered	3.2 mm to 6.4 mm (1/8 in to 1/4 in)
	Laminated	3.2 mm to 6.4 mm (1/8 in to 1/4 in)
	Wired	6.4 mm (1/4 in)
	Minimum pane area for all types of glass	1.2 m (4 ft)
Microphone:	Omni-directional 360° electret	

Environmental considerations

Temperature:	Functional range: -10°C to +49° (+14°F to +120°F)
	UL only: 0°C to +49°C (+32°F to+120°F)
	EN 50130-5 Class II only: -10°C to 40°C (+14°F to +104°F
Environment	Complies with EN50130-5 Class II
Relative humidity:	Up to 93% non-condensing
Wall and cover tamper switch:	Transmits a tamper switch signal when the unit is removed from its base, or the unit is pulled away from the mounting surface
Frequency:	433.42 MHz
Use:	Intended for indoor use.

Ordering information

RFGB Wireless acoustic detector
RADION wireless glass break detector.
Order number **RFGB | F.01U.253.606 F.01U.383.288**

RFGB-CHI Wireless acoustic detector
RADION wireless glass break. For use in China only.
Order number **RFGB-CHI | F.01U.253.623**

Services

EWE-DETCTR-IW 12 mths wrty ext detector general

12 months warranty extension
Order number **EWE-DETCTR-IW**