RF835 Wireless TriTech Detectors

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BOSCH
Invented for life

- 11m x 11m (35 ft by 35 ft) coverage
- Up to 45Kg (100 lb.) Pet Immunity
- Flexible Mounting Height
- Compatible with Bosch premises wireless systems
- Draft and Insect immune

The RF835 Wireless TriTech PIR/Microwave Detectors use artificial intelligence to detect motion and provide immunity to false alarms caused by pets or animals. An integral RF transmitter reports low battery and tamper status, and sends a supervisory signal to the control panel.

Functions

Signal Processing
Uses passive infrared and microwave technologies to provide an alarm condition when both fields of protection are simultaneously activated. Alarm signals must meet the signaling requirements of both technologies to activate an alarm. Microwave range is factory set, but can be adjusted if desired.

PIR Signal Processing
Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. The detectors tolerate extreme levels of heat and light from heaters and air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights. There are three sensitivity settings.

Microwave Signal Processing
Adaptive processing adjusts to background disturbances. This helps to reduce false alarms while maintaining catch performance.

Test Features
Externally visible, tri-color alarm LED indicates each technology independently.

Supervised Microwave
Patented fully supervised microwave circuitry provides single technology coverage in the event the microwave subsystem fails.

Pet Immunity
The detector is able to distinguish between signals caused by humans and signals caused by pets such as a dog up to 45 kg (100 lb) or two dogs at 27 kg (60 lb) or up to ten cats. This provides immunity to false alarms while maintaining proper catch performance of human targets.

Draft and Insect Immunity
The sealed optical chamber provides immunity to drafts and insects.

Temperature Compensation
The sensor adjusts its sensitivity to maintain consistent catch performance at critical temperatures.

Certifications and approvals

Australia	RF835 complies with Australian EMC
Europe	RF835E and RF835E-C comply with EN50131-1, Grade 2
USA	RF835 complies with Federal Communications Commission (FCC)

Region	Certification	
Australia	RCM	[RF835E only]
Europe	CE	RF835E and RF835E-C models only: 89/336/EEC, EN50082: 1997, EN50504: 1995, EN55022: 1998 (CISPR 22: 1997 Class B), EN50130-4: 1995, EN61000-3-2: 1995 (-3-3: 1994), EN61000-4-2: 1995 (-4-3: 1996, -4-4: 1995, -4-5: 1995, -4-6: 1996, -4-11: 1994), EN 300 220-3: 2000, EN 300 440-2: 2000, EN 301 489-3
	CE	RF835E and RF835E-C models only: 73/23/EEC, IEC 60950: 2000
USA	UL	RF835 only: ANSR: Intrusion Detection Units (UL639)
Canada	IC	RF835 only: 12491021658
China	CCC	RF835-CHI: 2009031901000562
Brazil	ANATEL	RF835E only: 0255-06-1855

Installation/configuration notes

Compatibility Information

The RF835 Series products are compatible with the following combinations of receivers and control panels:

RF835

Receivers	Control Panels
RF3212	Solution Ultima 844, 862, and 880 control panels, CC488 control panels
RF3213	VR-8 control panels
RF3222	DS7400XiV4 control panels
RF3224	DS7240, DS7220, D6412, D4412

RF835E and RF835E-C

Receivers	Control Panels
RF3212E	Solution Ultima 844, 862, and 880 control panels, ICP-CC488 control panels
RF3213E	VR-8 control panels
RF3222E	DS7400XiV4 control panels
RF3227E	DS7240, CC7240-A Solution 40 control panel
RF3228E	Marise control panels
RF3249E	DA (Abacus) control panels

Mounting Considerations

- Mounting height for the detector is between 2 m (6.5 ft) and 2.4 m (8.0 ft).
- The wall tamper cannot be used in corner mount installations or when using the optional swivel bracket.
- The integral RF transmitter transmits 150 m (500 ft) in open air. However, in normal operation, it is recommended that the detector is within 30 m (100 ft) of the receiver.

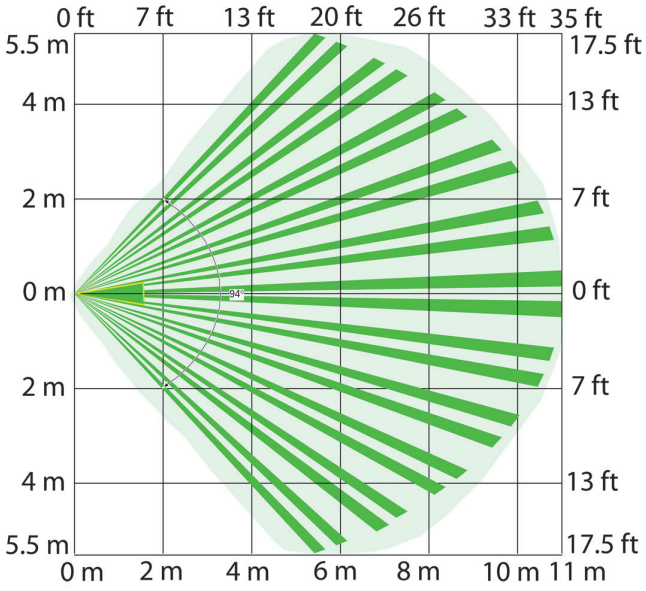
Notice

Actual acceptable transmitter range should be verified for each installation.

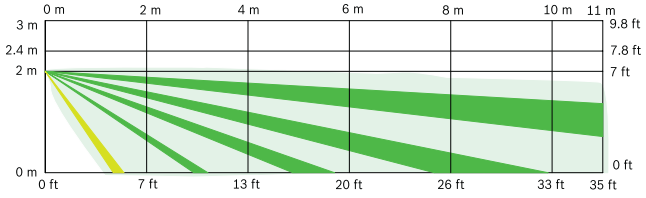
Battery Recommendations

The following battery types are recommended for correct operation of your detector: Duracell MN1500 or PC1500, Energizer E91, or Panasonic AM-3.

Coverage



Top View Broad: 11 m x 11 m (35 ft x 35 ft)



Side View Broad: 11 m x 11 m (35 ft x 35 ft)

Technical specifications

Environmental Considerations

Relative Humidity:	0% to 95% (non-condensing)
Temperature (operating):	0°C to +49°C (+32°F to +120°F)

RF835E and RF835E-C:

Complies with EN50131 Environmental Class II, Security Grade 2

Mechanical Properties

Dimensions:	13.8 cm x 7.2 cm x 6.4 cm (5.4 in x 2.8 in x 2.5 in)
Internal Coverage Pointability	Vertical : -4° to -10° Horizontal: ±10°
Sensitivity Selection	Field selectable for standard or intermediate sensitivity.

Power Requirements

Batteries:	Four 1.5 V AA alkaline batteries
Battery Life:	2 to 3 years under normal operating conditions with recommended battery types
Current Draw:	0.1 mA with LED disabled

Transmission Characteristics

RF835	
Microwave:	10.525 GHz
RF Transmission:	304.00 MHz
RF835E	
Microwave:	10.525 GHz
RF Transmission:	433.42 MHz
RF835E-C	
Microwave:	10.588 GHz
RF Transmission	433.42 MHz
RF835-CHI	
Microwave	10.525 GHz
RF Transmission	315.00 MHz

Trademarks

Eveready is a registered trademark of Eveready Battery Company, Inc.

Duracell is a registered trademark of the Gillette Company, USA, in the United States and/or other countries.

Panasonic is a registered trademark of Matsushita Electric Industrial Co., Ltd.

Ordering information

RF835 Wireless TriTech Detector (10.525 GHz/304 MHz)
Uses artificial intelligence to detect motion and provide immunity to false alarms caused by pets or animals
Order number **RF835**

RF835E Wireless TriTech Detector (10.525 GHz/ 433.42 MHz)
Provides Pet Friendly PIR and microwave, 11 m x 11 m (35 ft x 35 ft) coverage compatabile with Bosch premesis wireless systems.
Order number **RF835E**

RF835E-C Wireless TriTech Detector (10.588 GHz/ 433.42 MHz)
Uses artificial intelligence to detect motion and provide immunity to false alarms caused by pets or animals
Order number **RF835E-C**

Accessories

B335-3 Swiveling low-profile mount
Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°. Available in triple packs.
Order number **B335-3**

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