

RFRC-OPT Wireless option bus interface

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Invented for life



- ▶ Dual internal antennas provide spatial and polar RF signal reception for high reliability
- ▶ Cover and wall tamper detection
- ▶ Multiple device enrollment options as well as RF diagnostics ensure efficient and effective installation
- ▶ Supports supervision of wireless points and repeaters
- ▶ External status LEDs

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

The RFRC-OPT is a wireless receiver that connects RADION wireless peripherals such as the repeater, as well as detectors and transmitters, to supported Bosch control panels via the terminal block connection.

The receiver supports RF communication information at 433.42 MHz carrier frequency and is equipped with tamper detection, and detects and reports radio frequency interferences. The receiver supports 255 wireless devices that include points, keyfobs, and repeaters (8).

The receiver can be easily accessed and configured for a compatible control panel using the address switch on the back of the receiver housing. The receiver address switch provides a single-digit setting for the receiver's address, allowing for ease of installation.

Functions

The receiver uses the RADION wireless protocol which supports:

- Option bus communication
- Tamper input processing
- RF interference (jamming) detection and reporting
- Signal strength and margin reporting
- Enroll Device Database management

Address switch addressing

Use the address switch to easily assign a bus address or setup during installation.

Easy installation

The sliding self-locking enclosure has an integrated bubble level and a custom gap-free, lift gate style terminal block to make installation easier, faster, and more reliable.

LED display

The LED provides status and troubleshooting information about the receiver and its connection.

RF interference (jamming) detection and reporting

The receiver detects and reports interference jamming when the ambient noise level is above jamming thresholds for a period of 30 out of 60 seconds. The Jamming threshold is determined by comparing the lowest signal strength transmitter enrolled in the system vs. the ambient noise. If the noise level exceeds the signal strength of the transmitter, the jamming threshold is reached.

Communications

RF packet information is received through the use of two spatial and polar diversity antennas. The receiver then transfers status change information to the control panel.

Wall and cover tamper switch

The receiver transmits a tamper signal when someone removes the device from its base, or pulls it away from the wall.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Australia	RCM	[RFRC-OPT, RFRC-STR]
Germany	VdS	H116003 [AMAX 2100/3000, RFRC-OPT, RFUN, RFDW-RM, RFDW-SM, RFPR-12, RFDL-11, RFKF-TB, RFKB-FB]
Europe	CE	EMC, LVD, RoHS [RFRC-OPT, RFRC-STR]
	EN50131	EN-ST-000157 [RFRC-OPT]
	EN50131	EN-ST-000157 RFRC-OPT / RFRC-STR
Belgium	INCERT	B-509-0068 [RADION RFRC-OPT]
France	AFNOR	1223400002A0 [ICP-AMAX3-P2-EN, ICP-AMAX3-P3-EN]
	AFNOR	1223400001A2 FR AFNOR 1223400001A1 [ICP-AMAX4-P2-EN]

Installation/configuration notes**Mounting Considerations**

You can mount the wireless receiver in **residential**, commercial or industrial locations in which a compatible control panel is already installed. The installation of the wireless receiver should be at a distance no greater than 300 m (1000 ft) from the control panel.

Wiring Considerations

The wireless receiver connects to a control panel using the terminal block connections (R, G, B, Y). Use 22 AWG (0.6 mm) wires from the receiver to the control panel when connecting the wiring to the terminal block of the receiver.

The receiver provides wireless capabilities to RADION wireless peripherals via the terminal block (R, G, B, Y) connections using the screw terminal strip wiring connection.

Compatibility

Devices	
	RFRP repeater
	RFBT bill trap
	RFDL-11 motion detector TriTech
	RRDW-RM recessed door/window contact
	RFDW-SM standard door/window contact
	RFGB glass break
	RFKF-FBS
	RFKF-TBS
	RFKF-FB keyfob
	RFKF-TB keyfob
	RFPB-SB panic
	RFPB-TB panic
	RFPR-12 motion detector PIR
	RFPR-C12 motion detector (curtain) PIR
	RFSM smoke detector
	RFUN universal transmitter

Parts included

Quantity	Component
1	Receiver
1	Installation guide
1	Hardware pack

Technical specifications**Properties**

Dimensions:	139.7 mm x 209.6 mm x 31.8 mm 5.5 in x 8.25 in x 1.25 in
Wiring Distance:	300 m (1000 ft)
Wiring Gauge	0.65 mm (22 AWG) to 1.3 mm (16 AWG)

Power

Power/Voltage:	12 VDC
Maximum Current Draw:	100 mA
Frequency:	433.42 MHz

Environmental Considerations

Operating Environment:	-10° C to +55° C (+14° F to +131° F)
Relative Humidity:	Up to 93% non-condensing
Use:	Intended for indoor use.

Ordering information

RFRC-OPT Wireless option bus interface

A wireless receiver that connects RADION wireless peripherals such as the repeater, as well as detectors and transmitters, to supported Bosch control panels. For use in Europe.

Order number **RFRC-OPT**

Services

EWE-RFMOD-IW 12 mths wrty ext wireless module

12 months warranty extension

Order number **EWE-RFMOD-IW**

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