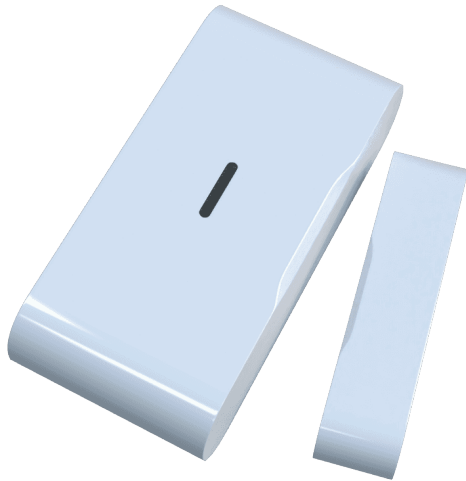


# RAC80, Radio Alarm Contact with magnet



The RAC80 Radio Alarm Contact detects the opening or closing of an electrical contact or of a door equipped with a magnet. This sends a radio warning to a Nurse Call unit. The RAC80 Radio Alarm Contact provides a magnetic reed contact for monitoring doors and windows. The internal reed contact is activated by an external magnet which can be placed in the position indicated.

The RAC80 can be powered either by a 3V battery or externally. It also has built-in terminal blocks for use as an input for monitoring an external alarm device.

## Functions

For use as a transmitter for particular types of event, the alarm can be activated by approaching and/or moving away a magnet, or by the opening and/or closing of an electrical contact. In either case, the alarm is immediately transmitted to the Nurse Call system.

### Reed Contacts

There is a reed contact on the right side of the device. The magnet assembly must be mounted within a certain distance of the device. When the distance between the magnet and the internal reed switch in the RAC80 Radio Alarm Contact then exceeds a pre-defined value, the radio alarm signal is sent to the Nurse Call system.

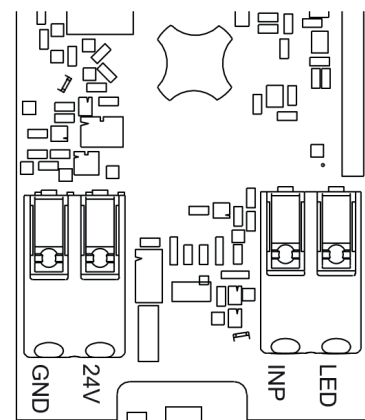
### Use as a Universal Point Transceiver

For use as a universal point transceiver, an external device can be connected to the terminal block on the RAC80 Radio Alarm Contact. A closing or opening signal from the external device initiates a radio signal from the RAC80 Radio Alarm Contact to the Nurse Call system.

- Easy to use and compact
- Battery life of up to 8 years
- Single configurable reed relay detector
- Single configurable external input
- Tricolour LED
- On-board battery and/or ext. supply
- Wireless alarm acknowledgement
- Daily radio messaging
- Wireless programming and firmware update
- Radio link monitoring according to VDE 0834
- Battery-level monitoring
- Bidirectional radio

## Pinout

Pin	Function
LED	Output analogue open collector, 30V max., 100mA max. drawn by external supply (ex=LED, BUZZER)
INP	Alarm digital input. NO=Trig 7, NC=Trig 8 By default: NO = Door/Window Terminal. NC = Disabled
24V	Analogue external power supply: 6V - 30V, 40mA min to source
GND	GND (external power supply and input / output reference)



## Installation / Configuration Recommendation Notes

- Allow a minimum height of 20cm from the ground.
- Do not use on metallic surfaces.
- Install the magnet on the moving part (door or window) and the radio transmitter on the frame.
- The RAC80 is not waterproof.

## Certifications and Approvals

RED 2014/53/EU  
 EMC 2014/30/EU  
 LVD 2014/35/EU  
 RoHS 2011/65/EU  
 WEEE 2012/19/EU  
 EN 62368-1 (2014 + AC :2015)  
 EN 62479 (2010)  
 EN 50130-4 (2011-06 + A1 :2014)  
 EN 300 220-2 V3.1.1 (2017-02)  
 EN 301 489-1 V2.2.2 (Final draft: 2019)  
 EN 301 489-3 V2.1.1 (2019)  
 EN 50581 (2012-09)  
 VDE 0834-1 (2016-06)  
 VDE 0834-2 (2017)

## Parts Included

Quantity	Component
1	RAC80 Radio Alarm Contact, including battery
1	Magnet
1	Double-sided foam tape for Alarm Contact
1	Double-sided foam tape for Magnet
1	Leaflet with instructions

## Ordering information

Part	Designation	Reference
RAC80-NC	RAC80 Radio Alarm Contact with magnet	T.240.001.482
3V battery set	3V Lithium Battery CR2430 (10 pcs)	4.998.153.678

## Technical specifications

Dimensions (L × W × D)	Transmitter part: 64 × 30 × 15mm Magnetic part: 50 × 11 × 15mm (not including double-sided foam tape)
Weight	Transmitter part: TBDg Magnetic part: TBDg (not including double-sided foam tape)
Frequency	868.8MHz bidirectional
Power supply	Replaceable 3V lithium battery CR2430 or external 6-30 VDC voltage
Power Consumption	Transmission: max. 25mA Reception: max. 15mA
Idle mode: max. 2.5-6.5µA	Complies with Cat 1.5 as specified in EN 300220-1 V3.1.1
Receiver category	Complies with Cat 1.5 as specified in EN 300220-1 V3.1.1
Battery life	Up to 8 years (5 alarms/day) Up to 2.5 years (according to VDE 0834-1: 5 alarms/day, supervision every 30 seconds)
Automatic battery test	Daily check and at every alarm
Battery alarm	At approx. 10% remaining
Operating temperature	-10°C to 55°C
Storage temperature	-20°C to 80°C
Frequency stability (-10°C to +55°C)	< 2.5kHz
Modulation	FSK
Antenna	Integrated ceramic, external wire possible
Radiated power	Typ. 1mW
Environmental class	I
Maximum range in free field	Up to 300m