

ZRFWD

# WinDoor RF

#### **TECHNICAL DOCUMENTATION**

#### FEATURES

- KNX RF (RF1.R @ 868.3 MHz) device for detection and notification of window/door opening and closing
- Tamper contact with parameterizable sendings
- Heartbeat and low-battery warning functionality
- Dimensions 73 x 19 x 17 mm
- Surface-mounted
- Conformity with the CE, UKCA, RCM directives

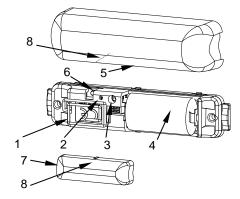


Figure 1: WinDoor RF

1. RF Antenna	2. Programming LED	3. Programming button	4. Battery
5. Cover	6. Tamper button	7. Magnet	8. Alignment marks

Programming/Test button: short press to set programming mode. If this button is held while connecting the battery, it enters the safe mode.

Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after power failure) and if the device is not in safe mode, it emits a red flash.

CONCEPT		DESCRIPTION			
Type of device		Electric operation control device			
	Voltage (typical)	3.6 VDC			
Power supply	Battery type <sup>1</sup>	1/2AA (ER14250) Li-SOCI2	1/2AA (ER14250) Li-SOCI2		
	Expected battery lifetime <sup>2</sup> (years)	5			
	Maximum concumption3	mA	mW		
	Maximum consumption <sup>3</sup>	23.4	84.2		
Communication type		KNX RF Ready (Semi-directional)			
Radio frequency		868.3 MHz	868.3 MHz		
Maximum transmitting power		20 mW (13 dBm)			
Operation temperature		0 +55 °C	0 +55 °C		
Storage temperature		-20 +55 °C			
Operation humidity		595%	595%		
Storage humidity		595%			
Complementary characteristics		Class B			
Protection class					
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period		Long			
Degree of protection		IP20, clean environment			
Installation		Surface-mounted on windows or doors. The distance between magnet			
		and sensor must not exceed	and sensor must not exceed 15 mm (7 mm in case of steel-made frame		
		and door).			
RF Range⁴		Up to 125 m in free-field			
Operation indicator			The programming LED indicates programming mode (red). After the		
		initialisation (1 s), five quick flashes (5 x 0.1 s) of the LED notify the			
		correct recognition of the closed door.			
Weight		27 g			
PCB CTI index		175 V			
Housing material		PC FR V0 halogen free			

<sup>1</sup> See "Note about the batteries".

<sup>2</sup> Considering one hearbeat sending each day, 7 open/close cycles per day and medium signal power.

<sup>3</sup> The maximum consumption depends on the transmission power parameterized.

<sup>4</sup> The maximum range depends on several factors such as environmental conditions, device orientation, type and thickness of the surrounding materials, etc.

## INSTALLATION INSTRUCTIONS

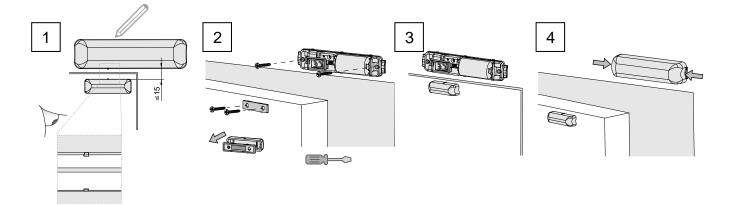
1. Place the sensor on the door/window frame, and the magnet directly on the edge of the door/window. Align the marks correctly and mark the position of both of them. The distance between the sensor and the magnet when the door/window is closed must be lower than 15 mm (7 mm in case of steel). For details on the different types of installation, please refer to the technical note "Installation WinDoor RF".

2. Fix the back cover of the sensor on the previously marked locations using the supplied screws (0.28 Nm max.) or the adhesive strips. Do the same with the magnet (in case of screw fixing first remove the cover with a screwdriver and, once the back cover is fixed, place back the magnet with its cover).

3. With the door closed, verify that the device is completely off by pressing the programming button shortly, and then remove the plastic strip that isolates the battery. Check that the device starts (programming LED in red colour for 1 s) and then that the closed door is recognized (five quick flashes).

4. Place back the sensor cover. If it is necessary to remove the cover again, pull it out by pressing on its two ends.

To download the individual address or the application press the programming button before starting the ETS download.



▲ NOTE ABOUT THE BATTERIES: The batteries required by this device, due to their very nature, can undergo a passivation process if not used for a long period. The batteries delivered by Zennio are guaranteed to be not passivated, but if the installation is postponed for several months, a depassivation process may be necessary. This device performs an automatic depassivation process during the startup, which can take several minutes depending on the status of the battery and lead to successive restarts. Although this should be sufficient in most cases, if the battery is severely passivated, low-battery notifications or restarts during normal operation may arise. In such a case, Zennio recommends installing a new battery or performing a manual depassivation procedure. Please contact Support for details (support@zennio.com).

#### BATTERY REPLACEMENT

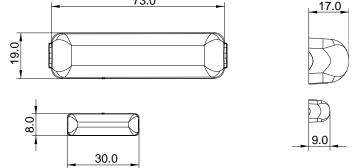
1. Release the cover by pressing on the two ends.

2. Remove the battery being careful not to damage the antenna or the printed circuit board. Push the programming button without the battery.

3. Insert the new battery paying attention on the polarity. Check that the device starts (programming LED in red colour for 1 s) and then that the closed door is recognized (five quick flashes).

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# 4. Put the sensor cover back.



## SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.

- This device is not suitable for security applications in alarm systems.
- Avoid to install the device close to radioelectric devices. The materials of the building and of the elements near the device could influence on its coverage range.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material , while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to http://zennio.com/licenses.