# **TECHNICAL DOCUMENTATION**

# **FEATURES**

- KNX RF (RF1.R @ 868.3 MHz) device for detection and notification of window/door opening and closing
- Available in the following colors: grey (RAL 9006), anthracite black (RAL 9004), white (RAL 9016) and brown (RAL 8016)
- Tamper contact with parameterizable sendings
- Heartbeat functionality
- Dimensions 73 x 19 x 17 mm
- Surface-mounted
- Conformity with the CE, UKCA, RCM directives

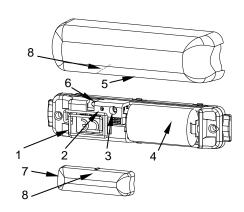


Figure 1: WinDoor RF

1. RF Antenna	2. Programming LED	3. Programming button	4. Battery
5. Cover	<ol><li>Tamper button</li></ol>	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 Electric operation control device		
Type of device				
	Voltage (typical)	3.6 VDC		
	Battery type <sup>1</sup>	1/2AA (ER14250) Li-SOCI2		
Power supply	Expected battery lifetime <sup>2</sup> (years)	5		
	Maximum consumption <sup>3</sup>	mA	mW	
	Maximum consumption	23.4	84.2	
Communication	type	KNX RF Ready (Semi-directional)		
Radio frequency	1	868.3 MHz		
Maximum transmitting power		20 mW (13 dBm)		
Operation temperature		0 +45 °C		
Storage temperature		-20 +55 °C		
Operation humidity		5 95%		
Storage humidity		5 95%		
Complementary characteristics		Class B		
Protection class				
Operation type		Continuous operation		
Device action ty	pe	Type 1		
Electrical stress	period	Long		
Degree of protect	ction	IP20, clean environment		
		Surface-mounted on windows or doors. The distance between magnet		
Installation		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 indica	ator	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		
Housing material		PC FR V0 halogen free		

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

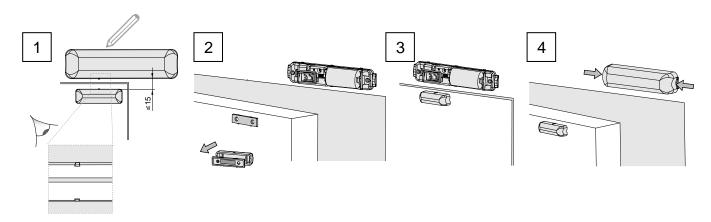
<sup>&</sup>lt;sup>3</sup> The maximum consumption depends on the transmission power parameterized.

<sup>&</sup>lt;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 adhesive strips. Do the same with the magnet.
- 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.

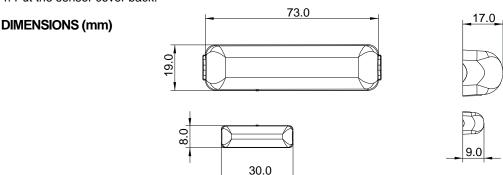
To download the individual address or the application press the programming button before starting the ETS download.



MOTE 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, 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).
- 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.
- This device uses Li-SOCI2 batteries, this kind of batteries have explosion risk in case of replacing them with wrong types batteries. Please, be careful during the battery replacement.
- 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 https://zennio.com/licenses.