

GENERAL DESCRIPTION

EK-WL8-IN is a wireless device that incorporates a single monitored input. It is designed to receive signals from external devices via a volt free relay contact.

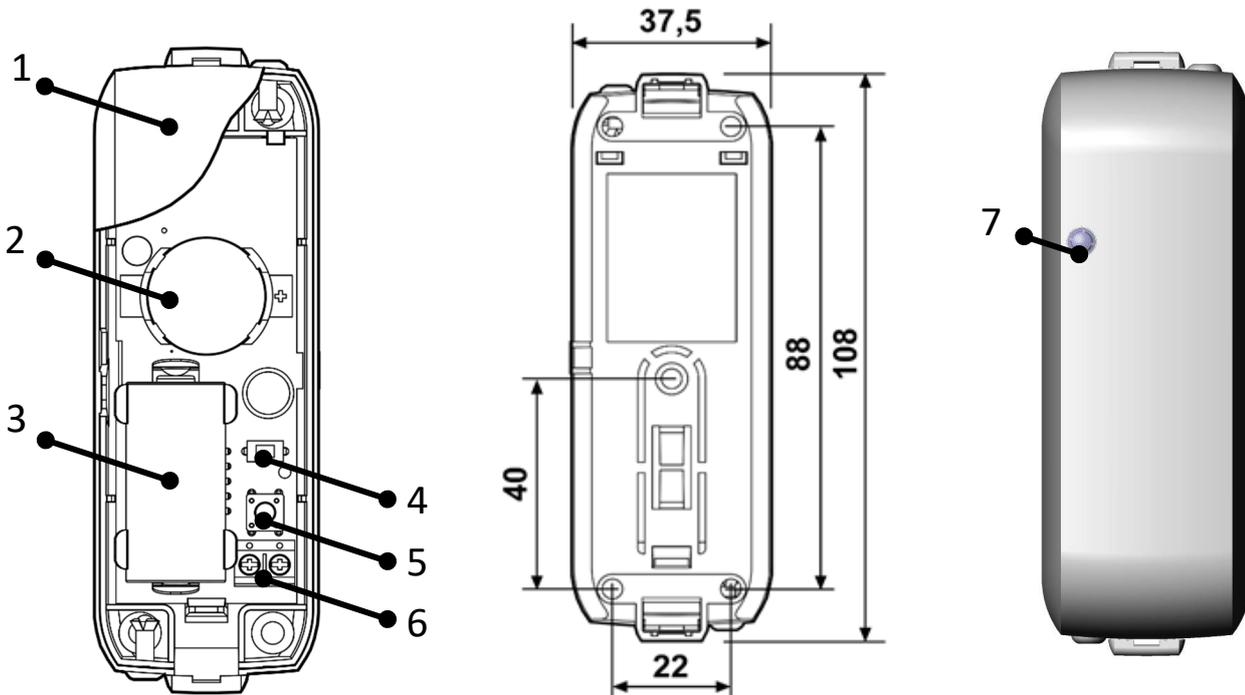
The device is supplied with a mounting kit (an optional back box is available EK-BOX-02).

The product complies with the requirements of the EN54-18:2005 and EN54-25:2008 standards.

FEATURES

- Bi-directional wireless communication
- Intelligent algorithms
- Tamper switch
- 10-year battery life
- Self-optimizing wireless frequency and amplitude algorithms

GENERAL OVERVIEW



1. Cover
2. Secondary battery
3. Main battery
4. Program button ("Prog.")

5. Tamper switch ("Tamp.")
6. Monitored input zone ("ZN")
7. LED indicator

	EK-WL8-IN WIRELESS SINGLE INPUT MODULE	
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TECHNICAL SPECIFICATIONS

Communication range with a translator or expander	1200 m
Radio frequency	866 – 869.85 MHz
Modulation type	GFSK
Operating frequency channels	6
Radiated power	Not more than 25 mW
Receiver category (EN300-220-1)	1.5
Battery life:	
Primary battery (type CR123A)	8-10 years
Secondary battery (type CR2032)	Not less than 3 months (after primary battery low fault)
Battery voltage (both)	3V
Dimensions	109 mm x 37 mm x 30 mm
Weight	70 g
Max tolerated humidity	95% RH
Operating temperature range	From –10 °C to +55 °C

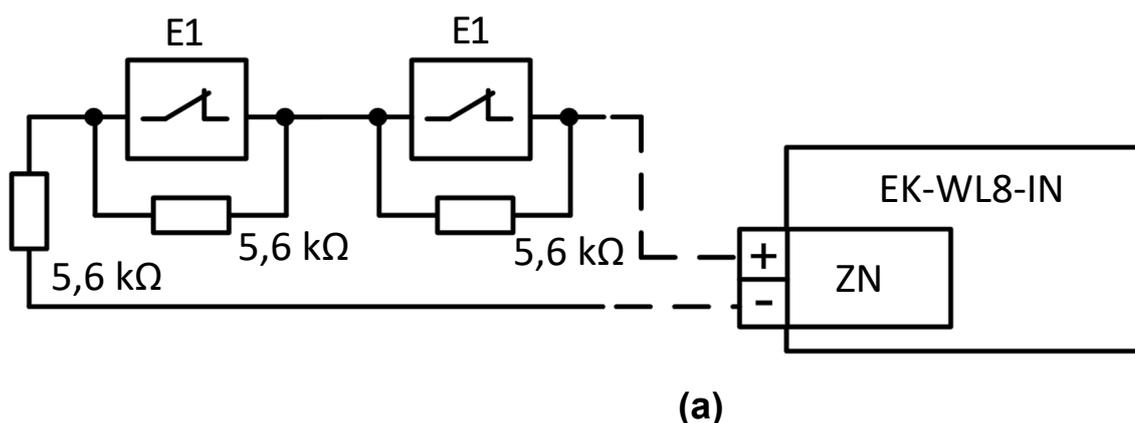
NOTE Check the latest version of the product specification document STFV.425113.007-E-PS for further data, obtainable from the manufacturer.

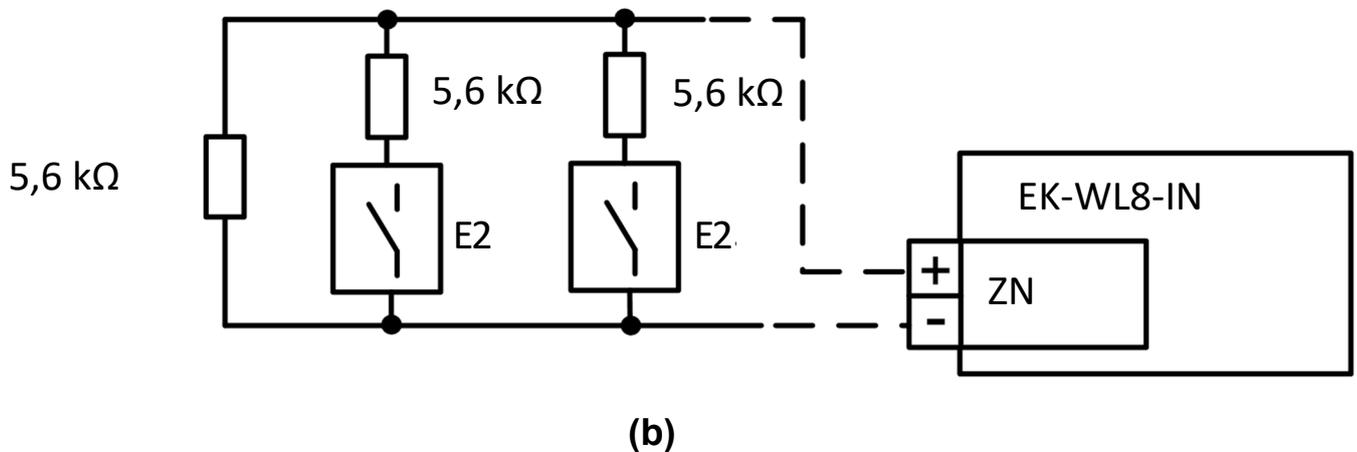
CONNECTIONS

The device is designed to receive signals from external devices via a volt free relay contact.

Connecting devices with normally closed dry contacts is shown in figure 1 (a).

Connecting devices with normally open dry contacts is shown in figure 1 (b).





E1 – devices with normally closed dry contacts

E2 – devices with normally opened dry contacts

Figure 1 – Connecting devices with normally open or normally closed dry contacts

EK-WL8-IN changes its state according to the total resistance of the input circuit:

State	Total resistance of the input circuit [kΩ]
Fault (short circuit)	≤ 0.2
Alarm	0.5 – 2.5
Normal operation	4 - 7
Alarm	10 - 20
Fault (open circuit)	≥ 40

Maximum wire length should not exceed 3 meters.

PROGRAMMING

The “Prog.” button on the device is used for initializing the module on to the system. Please refer to the translator manual for full instructions on how to add a device to the system. The device can also be initialized using the “Ekho Configuration” software.

INSTALLATION

To install the device on to the wall, remove the outer cover, fix the device on to the wall using screws, connect the input circuit wiring and clip the outer cover back on.

Preferably the device should be installed away from metallic objects, doors and power lines, as they can result in reducing the communication distance. It is also important

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to avoid installing the device near electronics and computer equipment in order to protect them from potential electromagnetic interference.

The maximum input wire length should not exceed 3 meters.

INDICATION

The device has a LED, which indicates its state according to the following:

LED indication	Device's state
No indication or green flashes	Standby mode
Yellow flashes every 4 seconds	Fault state – low battery
Red flashes every 2 seconds	Fire alarm

ANALOG DATA

The device provides the translator module with analog data about the current total resistance of the input circuit, air temperature and voltage levels of its batteries. This information can be viewed in the “Ekho Configuration” software.

Sensor	Partition	Primary supply	Standby supply	Temperature	Analog. type 1	An. value 1
Ω 6 WL8-IN	003: Partition	3.1 V	3.3 V	25 °C	Zone input resistance	31 kOhm

By analyzing the voltages, you can manage maintenance procedures and predict when you will have to replace the batteries. Please refer to the software manual for full instructions on how to use the program for system maintenance.

WARNINGS & LIMITATIONS

Devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration. However, after 10 years continuous operation it is advisable to replace them to reduce the risk of reduced performance caused by external factors. Ensure the devices are only used with compatible control panels. Detection systems must be checked, serviced and maintained on a regular basis to confirm correct operation.

Refer to and follow National Codes of Practice and other internationally recognized fire engineering standards. Appropriate Risk Assessment should be carried out initially to determine correct design criteria and updated periodically.



WARRANTY

All devices are covered by a 3-year limited warranty (does not apply to batteries). The warranty is voided by mechanical or electrical damage caused by incorrect handling or usage. Product must be returned via an authorized supplier for repair or replacement along with full information on the identified problem.

BATTERY REPLACEMENT

When a battery requires replacement, both batteries must be changed together.

- a. Open the case of the device.
- b. Remove the batteries.
- c. Insert the new batteries as detailed in the installation manual above – take care to observe + / - polarity.
- d. Close the case of the device.
- e. Test the device in accordance with the manufacturer's instructions.

It is recommended to change both batteries after 10 years of operation regardless of their indicated discharge level.

To replace the batteries, use Panasonic CR123A (primary battery) and Varta CR2032 (secondary battery) or other with similar characteristics. The batteries must meet the following standards: UL 1642 lithium batteries, UL certified at www.ul.com or IEC 60086-4 Primary batteries, Part 4: Safety of lithium batteries. The remaining shelf time of the new batteries must be not less than 8 years.

Failure to observe these instructions will void the device warranty and any liabilities.

CAUTION

- Replacement batteries must be of the same type.
 - Do not expose batteries to fire, hot ovens, or mechanical crushing/cutting of aa this can result in an explosion.
 - Exposing batteries to extremely high environmental temperatures can result in an explosion or the leakage of flammable liquid or gas.
 - A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

DISPOSAL

- Follow local regulations regarding disposal of the batteries.



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WIRELESS SINGLE INPUT MODULE**

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**FOR TECHNICAL SUPPORT & PRODUCT RETURNS
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APPROVALS



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