



Installation & Operation Manual

EMS

Wireless Multi-Sensor



Introduction

The EMS provides three (3) wireless zones in one device to use with your SOLO wireless security system. The EMS has one integral door/window magnet contact sensor, and support for up to two additional external sensors.

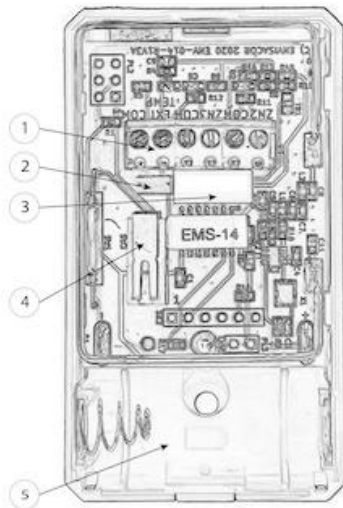
The EMS sensor has terminal connections that allow for up to two additional external sensors to be connected, such as a water/flood sensor, a hardwired door/window contact or an external temperature sensor.

The EMS also includes two tamper switches for your added security.

Product Specification

*** For indoor use only***

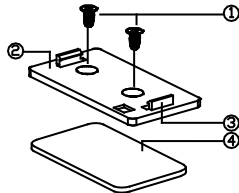
Specifications :	Package Contents:
Operating Frequency: 433.92Mhz Operating Temp.: -20°C~ 60°C (-4°F ~140°F) Battery: 1 Panasonic CR123A Lithium Battery Life: 3 years (under normal usage) Dimensions (WxHxD): 42x75 x15.27mm Build-in Detector: Tamper Switch, Back Switch, Reed Switch	1pc EMS sensor 1pc Bracket for Contact Magnet 1pc Magnet 2pcs Adhesive tape for Magnet / sensor 1pc Spacer 4pcs Screws for bracket/ sensor 1pc Installation & Operation manual



1. Terminal connector.
2. Jumper.
3. Device ID label.
4. Tamper switch.
5. Battery compartment.

Installation

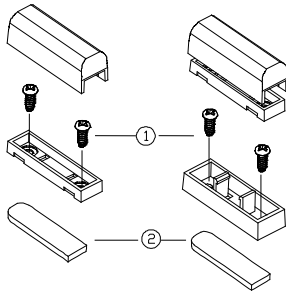
1. Select the location where the EMS is to be mounted. RF signals can be interrupted by metal objects, including metal doors or large mirrors. Ensure that these types of objects are not in the way as it can interfere with the proper operation of the EMS sensor.
2. Place the mounting bracket in the position you have selected. Secure the bracket by using the two screws or adhesive tape provided.



1. Screws to hold bracket
2. Mounting bracket
3. Tab to release door sensor
4. Adhesive tape

3. If you are using an external sensor on Zone 2 or Zone 3, it is recommended that you wire the sensor to the EMS before mounting the EMS on the bracket. See the section on wiring external devices for detailed information.
4. Open the house of the EMS and install the supplied battery. Use only a CR123A lithium battery.
5. If you are using the integral door/window sensor, note the side of the EMS with the two raised lines, indicating where the supplied magnet should be located. This is the same side as the small glass reed switch is fitted, visible when the case is open.
6. Mount the EMS using the tabs on the bracket. If necessary, use the supplied screw to secure EMS to the bracket.
7. Mount the magnet a maximum of 20mm (3/4") from the EMS.

1. Screws to magnet or spacer
2. Adhesive tape



8. For the magnet, use the screws provided. If necessary, use the spacers and adhesive tape provided.
9. Open and close the door/window to ensure that there is no interference.

Enrolment

Auto Enrolment

If you are using the SOLO's auto-enrolment feature, follow the instructions in your SOLO base station manual. Either tamper switch or reed switch will serve to identify the EMS to the base-station.

IMPORTANT: Only the integral Zone 1 of the EMS can be auto-enrolled. External Zone 2 and Zone 3 must use manual enrolment. See below.

Manual Enrolment

You can enrol the EMS manually using your service provider's web portal. If you are enrolling zones 2 and 3, you must use manual enrolment.

1. Record the 6-digit ESN number which is on a sticker on the side of the case and within the case
2. Use the ESN and the zone number to enrol the zone on the portal. All 3 zones use the same ESN but zones 2 and 3 are differentiated but appending a colon and the zone number. For example, if the ESN was 12345A, you would enter the following for each zone.

Zone 1	12345A
Zone 2	12345A:2
Zone 3	12345A:3

Operation

The EMS will transmit when any of the three zones are either opened or closed. When transmitting, the LED on the front cover of the EMS will illuminate briefly.

In addition to tamper protection, the EMS is fully supervised with the SOLO base-station. It also monitors the battery and will notify the SOLO base-station if the battery needs to be replaced.

Installing External Sensors or Contacts

The EMS can accept up to two external Normally-Closed (NC) dry contacts which are referred to Zone 2 and Zone 3. Zone 1 is reserved for the integral magnet sensor. The external zones can be used to monitor other local doors/windows, or other types of sensors like freeze/thaw and water-flow. Any NC contact can be used. The external zones may also be used for situations where the location of the EMS must be remote from the door/window that needs to be monitored due to RF interference or metal shielding.

- 1) Remove the cover by pressing on the depression on the one end and then lifting the top cover.
- 2) Using 22 gauge wire, bring the wire up through the opening in the back of the EMS and curl the wires to connect to the zone terminal. Zone 2 is connected on terminals ZN2 and COM. Zone 3 is connected ZN3 and COM.
- 3) Strip the wire, insert into the appropriate terminals, and tighten the terminals.
- 4) Replace the cover and mount the EMS onto its bracket.

Tamper Switches

The EMS has two tamper switches: one inside the cover to detect cover removal, and another on the back of the EMS to detect removal from the bracket. Both tamper switches need to be engaged for normal operation.

Because all three zones on the EMS share the same physical tamper switches, if a tamper is detected the SOLO system will report the tamper on all three zones.

Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one of the following measures:

Reorient or relocate the receiving antenna,

Increase the separation between the equipment and receiver,

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Limited Warranty

Envisacor Guarantees that every wireless door/window sensor is free from physical defects in material and workmanship under normal usage for one year from the date of purchase. If the product proves defective during this one-year warranty period, Envisacor will replace it free of charge. Envisacor does not issue any refunds. This warranty is extended to the original end user purchase only and is not transferable. This warranty does not apply to: (1) damage to units caused by accident, dropping or abuse in handling, or any negligent usage; (2) units which have been repaired, taken apart, or modified by an unauthorized personnel; (3)

units not used in accordance with instruction; (4) damages exceeding the cost of the product; (5) transit damage, initial installation costs, removal cost, or reinstallation cost.