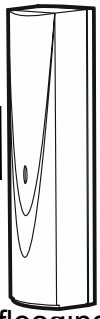
AFD-100

WIRELESS WATER FLOOD DETECTOR



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The AFD-100 wireless detector senses the presence of water leaks or flooding in rooms with plumbing. The detector is designed for use as part of the ABAX two-way wireless system. This manual applies to the detector with firmware version 5.00, which is supported by:

- ACU-120 / ACU-270 controller,
- ACU-100 / ACU-250 controller with firmware version 4.03 2014-05-15 (or newer),
- ARU-100 repeater with firmware version 2.00 2014-05-15 (or newer),
- INTEGRA 128-WRL control panel with firmware version 1.12 2013-12-20 (or newer).

1. Features

- External flood sensor.
- LED indicator enabled in test mode.
- Tamper protection against cover removal and tearing enclosure from the wall.
- Battery status control.

2. Specifications

Operating frequency band	868.0 MHz ÷ 868.6 MHz
Radio communication range (in open area)	up to 500 m
Battery	CR123A 3 V
Battery life expectancy	approx. 3 years
Flood sensor cable length	3 m
Environmental class according to EN50130-5	II
Operating temperature range	-10 °C...+55 °C
Enclosure dimensions	26 x 112 x 29 mm
Weight	96 g

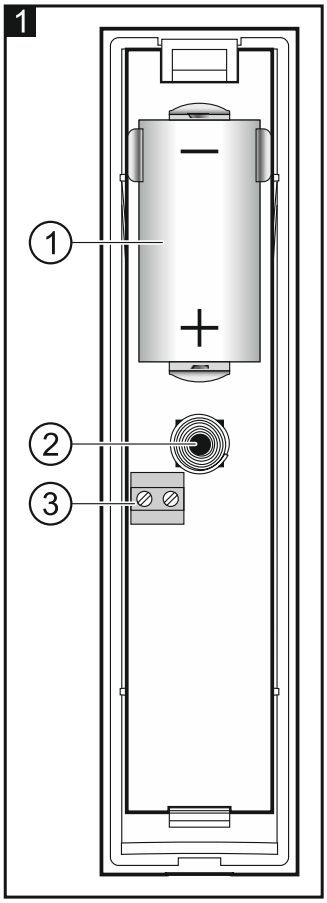
Hereby, SATEL sp. z o.o., declares that this detector is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be consulted at www.satel.eu/ce

3. Description

The detector is designed to be used in spaces where there is a risk of leakage from plumbing. Approximately 5 seconds after the water level reaches the height at which electrodes of the flood sensor are installed, the detector will start signaling flooding. A few seconds after the water level drops below the height at which electrodes of the flood sensor are installed, the flood signaling will stop.

Electronics board

Figure 1 shows the inside of the detector.



1. CR123A lithium battery.
2. tamper switch.
3. terminals for the flood sensor connection.

The LED is placed on the other side of the electronics board.

Alarms

The detector reports alarm in the following cases:

- flood detection,
- opening the tamper switch (tamper alarm).

Operating modes

Active – information about each alarm is sent immediately.

Passive – information about tamper alarm is sent immediately, while information about flood only during the polling time.

Test mode

If you want to test the detector, you can remotely enter the test mode. When in the test mode, the detector LED is working.

LED

The LED is working for 2 minutes after battery is inserted, as well as in the test mode. The LED indicates:

- polling – short flash (80 milliseconds),
- alarm – ON for 2 seconds.

Battery status control

When the battery voltage is below 2.75 V, information about low battery is sent during each transmission.

Note: *For additional information about the detector and its configuration please refer to the manual for ABAX wireless system controller.*

4. Installation

The detector is designed for indoor installation.

There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly.

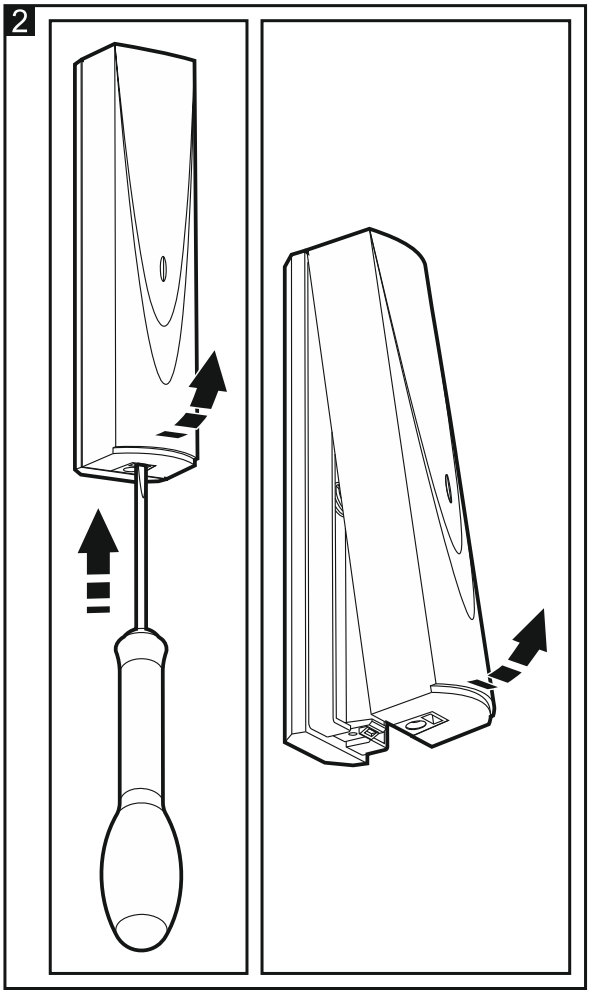
Be particularly careful during installation and replacement of the battery. The manufacturer is not liable for the consequences of incorrect installation of the battery.

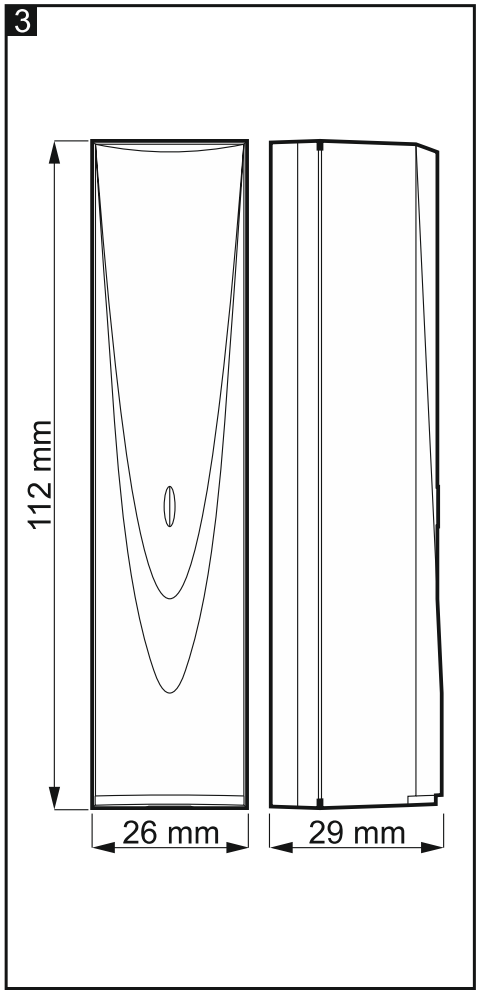
The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.

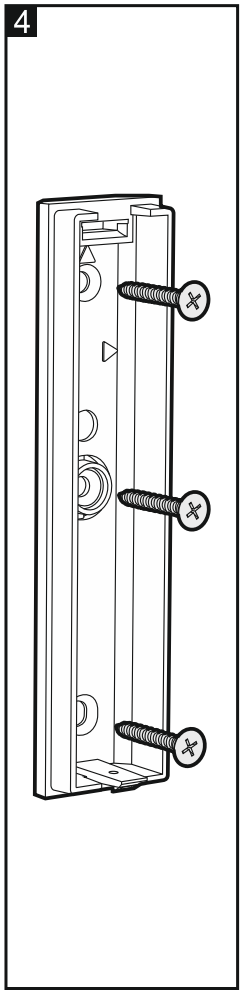
1. Open the detector enclosure (Fig. 2).
2. Install the battery and add the device to the wireless system (see the ACU-100 / ACU-250 / ACU-120 / ACU-270 controller manual or the INTEGRA 128-WRL / VERSA control panel

installer manual). The sticker with 7-digit serial number which shall be entered when registering the detector in the system can be found on the electronics board.

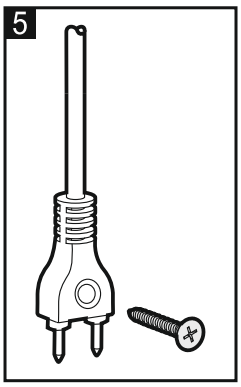
3. Close the detector enclosure.
4. Fasten the detector temporarily at the place of its future installation.
5. Check the level of signal received from the detector by the ACU-100 / ACU-250 / ACU-120 / ACU-270 controller or the INTEGRA 128-WRL control panel. If the signal level is lower than 40%, select another place for installation. Sometimes, it is sufficient to shift the device ten or twenty centimeters to obtain a considerable improvement in the signal quality.
6. Open the detector enclosure (Fig. 2).







7. Pull the flood sensor wires through the hole in the enclosure and screw them to the terminals on the electronics board.
8. Use screws to fix the enclosure base to the mounting surface (Fig. 4).
9. Close the detector enclosure.
10. Configure the detector according to your requirements. For information about the configuration, see the ABAX wireless system controller manual.
11. Launch remotely the test mode and carry out functional test of the detector by submerging the flood sensor in water.
12. Quit the test mode.
13. Secure the flood sensor wires and the flood sensor itself (Fig. 5). The detector is now ready for work.



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