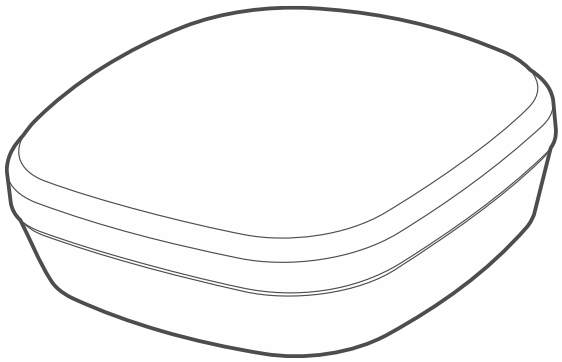
abax2

Wireless water flood detector

AFD-200

Firmware version 1.00

EN



CE

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Satel®

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IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully the manual.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

The rating plate of the device is located on the enclosure base.

CE The device meets the requirements of the applicable EU directives.

The device is designed for indoor use.

The device must not be disposed of with other municipal waste. It should be disposed of in accordance with the existing rules for environment protection (the device was placed on the market after 13 August 2005).

SATEL aims to continually improve the quality of its products, which may result in changes in their technical specifications and software. Current information about the changes being introduced is available on our website.
Please visit us at:
https://support.satel.pl

Hereby, SATEL sp. z o.o. declares that the radio equipment type AFD-200 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.satel.pl/ce

In the EU, this radio equipment is only permitted to operate in the 868 MHz frequency band.

The following symbols may be used in this manual:

- note,
- caution.

CONTENTS

The AFD-200 detector detects indoor water flooding. It can be installed in spaces where there are water facilities or in other spaces at risk of flooding. It is designed to work within the ABAX 2 two-way wireless system. The detector is supported by:

- ACU-220 / ACU-280 controller with firmware version 6.08 (or newer),
- ARU-200 repeater.

This manual applies to the detector with electronics version 1.3.

The detector is not supported by the ACU-220 / ACU-280 controller connected to a VERSA series control panel.

1. Features

- Flooding detection by means of a built-in probe.
- Detection of detector overturn.
- Encrypted two-way radio communication in the 868 MHz / 915 MHz frequency band (AES standard).
- Transmission channel diversity – 4 channels for automatic selection of the one that will enable transmission without interference with other signals in the 868 MHz / 915 MHz frequency band.
- Remote update of detector firmware.
- Remote configuration.
- Built-in temperature sensor (measuring range: -10 °C...+55°C).
- LED indicator.
- Built-in sounder.
- *ECO* option for longer battery life.
- Battery status control.

2. Description

The AFD-200 detector occupies one position on the list of wireless devices.

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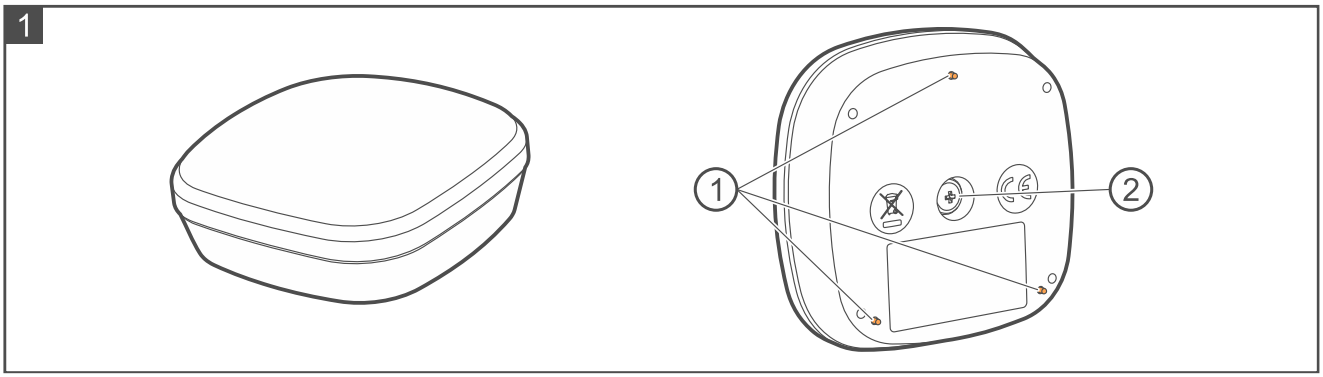

(1) probe electrodes.

(2) cover locking screw.

Radio communication

The detector connects to the controller at regular time intervals to provide information about its state (periodical communication). Additional communication takes place when there is flooding.

Flooding detection

The detector reports flooding / end of flooding. The information is sent a few seconds after the event occurred.

Detection of detector overturn

When the detector is turned on its side or upside down, after 1 minute the LED indicator and the sounder will indicate trouble. A few seconds after the detector is placed correctly, the trouble signaling will be cleared.

Energy saving mode (ECO)

If you want to prolong the battery life, you can enable the *ECO* option for the detector. When the *ECO* option is enabled, the periodical communication takes place every 3 minutes. This can significantly increase the battery life.

Test mode

In the test mode, the LED indicator and the sounder indicate periodical communication. For how to start and end the test mode, refer to the ABAX 2 controller manual.

LED indicator and sounder

The detector indicates:

- power-up – 1 flash and 1 beep,
- flooding – 1 flash and 1 beep every 5 seconds, when the detector detects flooding.
- overturn – 1 flash and 1 beep every 5 seconds, when the detector is turned over.
- periodical communication – 3 flashes and 3 beeps (only in the test mode – no more than 5 times).

Battery status control

When the battery voltage is below 2.75 V, a low battery status is sent during each transmission.

3. Electronics board

Do not remove the electronics board from the enclosure to avoid damage to the components on the board.

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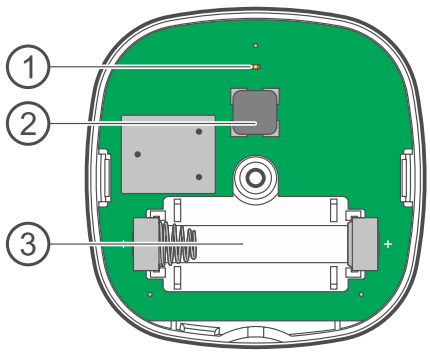

(1) red LED indicator.

(2) sounder.

(3) battery holder.

4. Installation

There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly. Do not crush the battery, cut it or expose it to high temperatures (throw it into the fire, put it in the oven, etc.).

Do not expose the battery to very low pressure due to the risk of battery explosion or leakage of flammable liquid or gas.

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.

The AFD-200 detector is designed for indoor use. The detector must be located within the radio range of the ABAX 2 controller. Thick walls, metal partitions, etc. reduce the range of the radio signal.

If the detector is to detect flooding at an early stage, place the detector where the water may accumulate before it floods the entire space.

1. Open the detector enclosure (Fig. 3).
2. Insert the battery (Fig. 4) and add the detector to the wireless system (see the ABAX 2 controller manual). The sticker with serial number required for registration of the detector in the system can be found on the electronics board.

In the INTEGRA system, you can add and configure the AFD-200 detector only in the DLOADX program.

In the PERFECTA 64 M system, you can add and configure the AFD-200 detector only in the PERFECTA Soft program.

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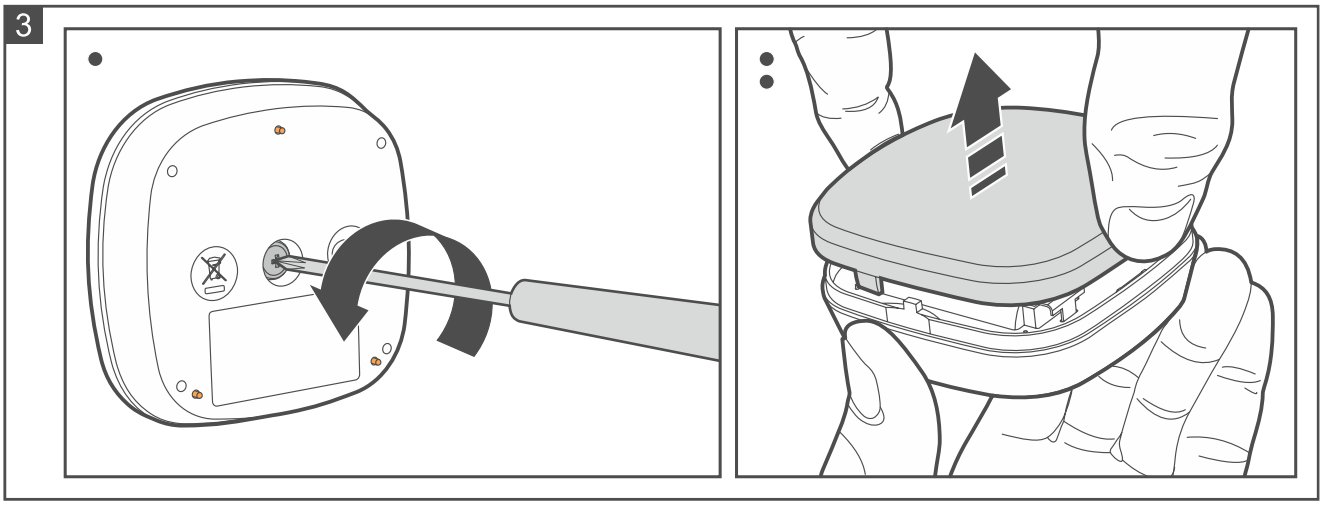

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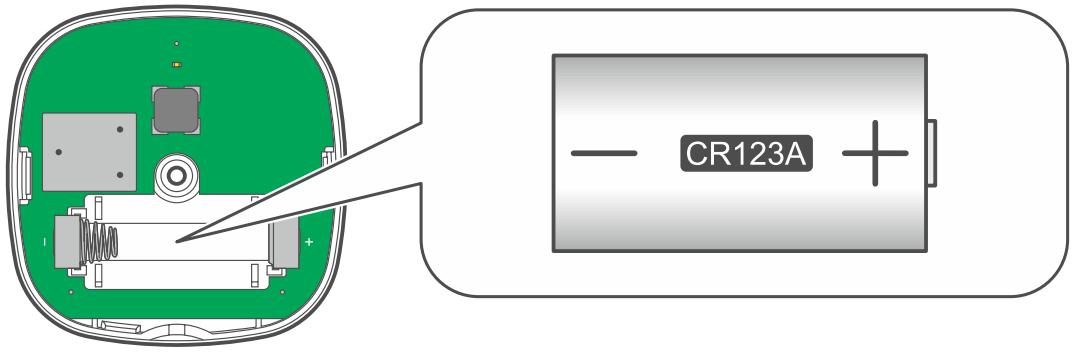

3. Close the detector enclosure (note that the cover only fits in one position) and secure it with a screw (Fig. 5).

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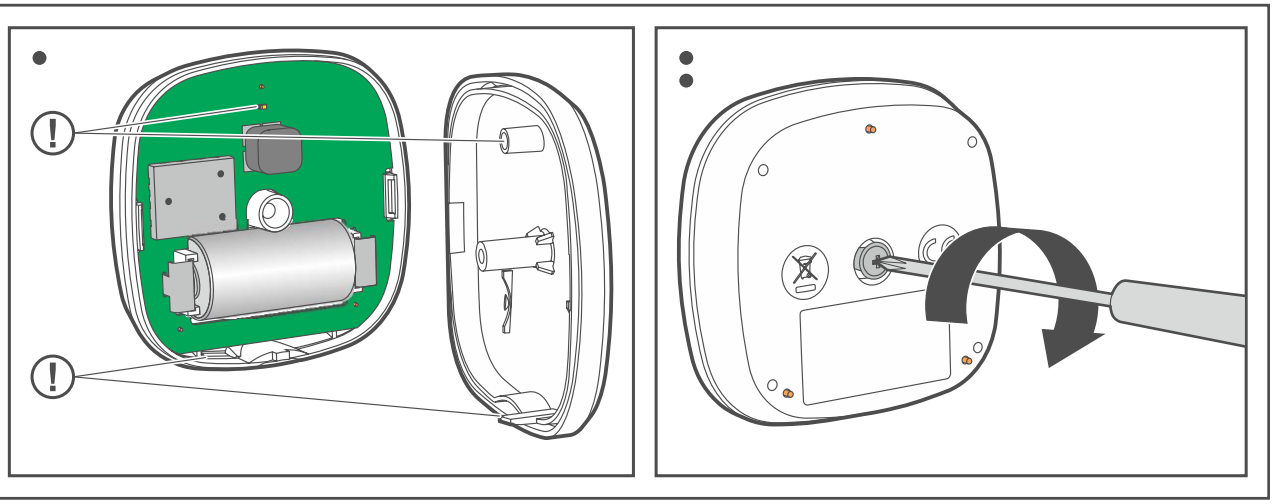

4. Place the detector in a puddle of water to make sure that an alarm is generated.
5. Place the detector on the floor in the selected area.
6. Check the level of signal received from the detector by the ABAX 2 controller. If it is lower than 40%, select another place. It may be sufficient to shift the detector ten or twenty centimeters.

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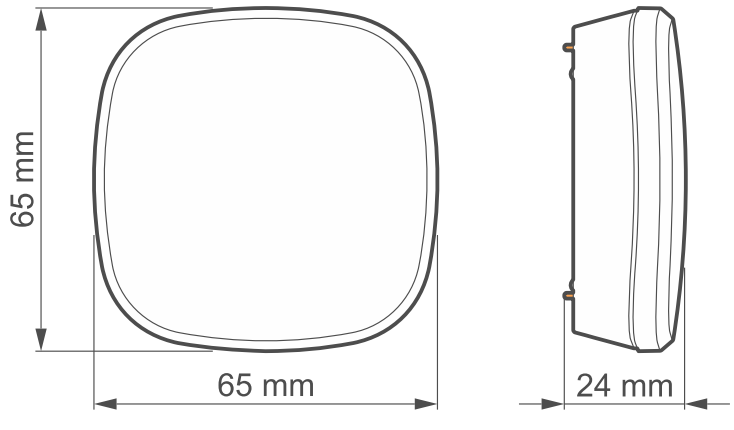

5. Specifications

Operating frequency band ..... 868.0 MHz ÷ 868.6 MHz / 915 MHz – 928 MHz

Radio communication range (in open area)

ACU-220..... up to 1200 m

ACU-280	up to 600 m
Battery	CR123A 3 V
Battery life expectancy	up to 5 years
Temperature measurement range	-10°C...+55°C
Temperature measurement accuracy	±1°C
Standby current consumption	45 µA
Operating temperature range	-10°C...+55°C
Maximum humidity	93±3%
Dimensions	65 x 65 x 24 mm
Weight	47 g