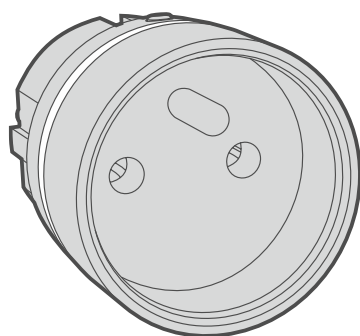


**abox2**

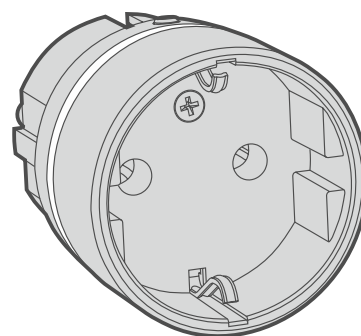
Smart plug  
**ASW-200**

**EN**

Firmware version 1.02



**ASW-200 E**



**ASW-200 F**

**CE**

asw-200\_en 05/24

**Satel**  <sup>®</sup>

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## IMPORTANT

Read this manual before connecting the device to mains supply.

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.



The device meets the requirements of the applicable EU directives.



The device is designed for indoor installation.



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).



The device meets the technical regulations of the Eurasian Customs Union.

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 ASW-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](http://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.

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The ASW-200 smart plug is used to remote control electrical appliances. The device is available in two versions:

- ASW-200 E with E type socket (EURO),
- ASW-200 F with F type socket (SCHUKO).

The plug is designed for operation within the ABAX 2 / ABAX two-way wireless system. It is supported by:

- ABAX 2:
  - ACU-220 / ACU-280 controller with firmware version 6.03 (or newer),
  - ARU-200 repeater.
- ABAX:
  - ACU-120 / ACU-270 controller (firmware version 5.04 or newer),
  - ARU-100 repeater (firmware version 2.02 or newer),
  - INTEGRA 128-WRL control panel (firmware version 1.19 or newer and firmware version of processor used to operate ABAX system 3.10 or newer).

## 1. Features

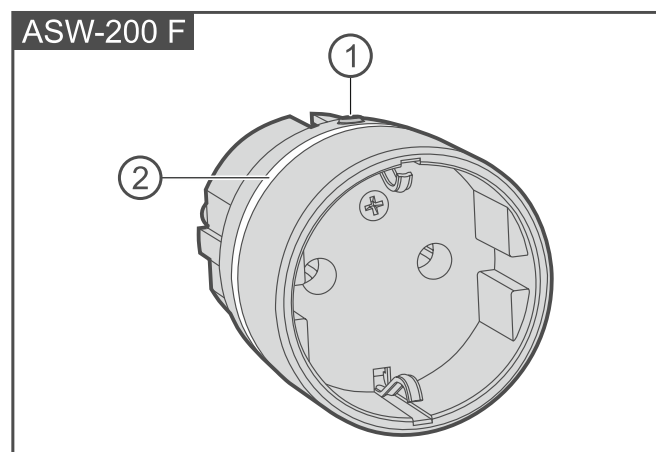
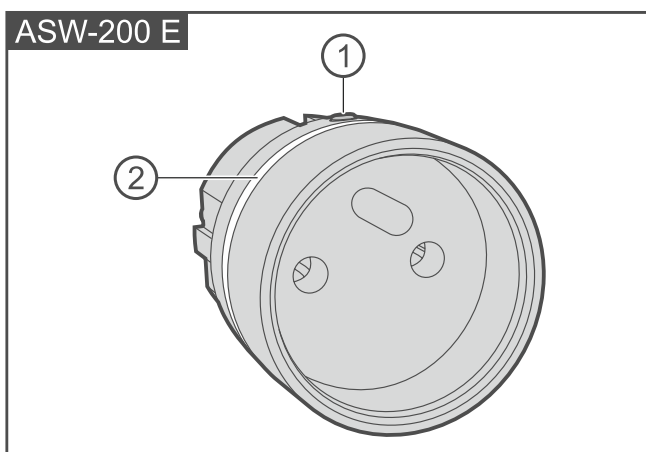
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- Control of electrical appliances up to 2300 W.
- Relay switched on when the voltage is at the zero cross point.
- Encrypted two-way radio communication in the 868 MHz / 915 MHz frequency band (AES standard).
- Transmission channel diversity – 4 channels 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 plug firmware.
- Remote configuration.
- LED indicator.
- Firmware protection against overload and overheating.

## 2. Description

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The ASW-200 plug occupies one position on the list of wireless devices.



① button.

## ② LED indicator.

### Button

The button is used to:

- control the plug (available functions depend on the operating mode – see “Operating modes”),
- configure the LED indicator (see “Configuring the LED indicator settings”),
- block / unblock the capability to add the plug to the system (press and hold for 10 seconds).

### LED indicator



*The LED indicator is disabled in a plug with factory setting, i.e. it only indicates warm-up and troubles (overload and overheating).*

*For details on how to configure the LED indicator, go to the “Configuring the LED indicator settings” section.*

The LED indicator indicates:

- ON in different colors for several seconds – warm-up after the plug is connected to a 230 VAC outlet.
- ON – plug is turned on. The color of the LED indicator:
  - changes depending on the power consumption of the appliance connected to the plug (e.g. blue – minimum power consumption; green – power consumption of 300 W; red – power consumption of 2300 W),
  - is always the same (you can select it during the LED indicator configuration).
- 1 red flash – plug has been turned on by pressing the button when remote control is blocked (mode 2).
- 2 red flashes – plug has been turned off by pressing the button when remote control is blocked (mode 2).
- 3 red flashes – blocking / unblocking remote control with a button (mode 2).
- flashing yellow – plug is turned off due to overload. The power consumption of the appliance connected to the plug exceeded 2300 W and the plug can no longer control it.
- flashing red – plug is turned off due to overheating. The plug will go back to work when it cools down.

### Radio communication

The ASW-200 plug connects to the controller / control panel at regular time intervals to provide information about its state (periodical communication). Additional communication takes place when:

- the plug button is pressed,
- control commands are being sent to the plug.

In the ABAX 2 system, information about the supply voltage of the plug and the power / current consumption of the appliance connected to the plug is also sent to the controller. The information is shown in the ABAX 2 Soft program. It can also be read from the controller using the Modbus RTU communication protocol.



*For some devices, the power / current consumption is not measured.*

## Operating modes

You can select the operating mode when configuring the ASW-200 plug settings (see the controller / control panel manual).

**mode 0**– remote control only. Pressing the button does not control the plug (appliance connected to it) but information is sent to the controller whenever the button is pressed.

**mode 1**– remote or manual control. Press the button to turn ON / OFF the plug (appliance connected to it). Information about the plug state is sent to the controller / control panel.

**mode 2**– remote or manual control but with option to manually block the remote control. Press the button to turn ON / OFF the plug (appliance connected to it). Press and hold the button for about 3 seconds to block / unblock the remote control. Information about the plug state is sent to the controller / control panel.

## Protection against overload and overheating

The plug has a firmware-based protection against overload or overheating.

### Overload

If the power consumption of the appliance connected to the plug exceeds 2300 W, the plug will turn off. The plug will go back to work when it is restarted (disconnect the plug from the outlet and plug it back in).



*Do not use the plug to control appliances whose power consumption is higher than 2300 W.*

Overload is indicated by the LED indicator.

### Overheating

If the temperature in the plug exceeds the maximum permissible value, the plug will turn off. The plug will go back to work when it cools down.

Overheating is indicated by the LED indicator.

## 3. Start-up

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The ASW-200 plug should be used indoors, in spaces with normal air humidity. When in use, the plug must be located within the radio range of the controller / control panel. Thick walls, metal partitions, etc. will reduce the range of the radio signal. Use the ARF-200 tester to check the level of radio signal. Place the tester next to the 230 VAC socket. If the radio signal level indicated by the tester is higher than 40%, the plug can be used there.

1. Connect the plug to the selected 230 VAC socket.
2. Add the ASW-200 controller to the wireless system and configure its settings (see ABAX / ABAX 2 controller manual or INTEGRA 128-WRL control panel manual and “Configuring the LED indicator settings”). The sticker with the serial number required to register the plug in the system can be found on its enclosure.



*In the ABAX system, the plug is identified as ASW-100.*

*In the VERSA alarm system, you can add and configure the ASW-200 plug in the DLOADX program.*

*Simultaneous operation of the ASW-200 plug by the ABAX 2 and ABAX controller / INTEGRA 128-WRL alarm control panel is not possible.*

3. Check if the plug works properly.



If you need to perform any service or maintenance work on the appliance, disconnect it from the ASW-200 plug first. Leaving the appliance connected when the plug is inserted into the 230 VAC socket causes a risk of electric shock.

## 4. Configuring the LED indicator settings

The LED indicator can operate in one of the following modes:

- when the plug is turned on, the LED indicator is ON. The color depends on the power consumption. It changes from blue (minimum power consumption) to red (maximum power consumption – 2300 W).
  - when the plug is turned on, the LED indicator is ON in the selected color (7 colors available).
  - LED indicator is OFF (default setting).
1. Disconnect the plug from the 230 VAC outlet.
  2. Press and hold the button on the plug enclosure.
  3. Connect the plug to the 230 VAC outlet.
  4. When the LED indicator is ON in different colors (warm-up indicated), release the button. The LED indicator will indicate the current operating mode:
    - changing colors smoothly from blue to red – the LED indicator indicates the power consumption by the connected appliance,
    - flashing one color – the LED indicator indicates that the plug is turned on,
    - OFF – the LED indicator is disabled (indicates only warm-up and troubles).
  5. Keep pressing the button until you select the new operating mode. The changes will be saved a few seconds after the last button press.

## 5. Specifications

Operating frequency band .....	868.0 MHz ÷ 868.6 MHz / 915 MHz – 928 MHz
Radio communication range (in open area)	
ABAX 2.....	up to 1000 m
ABAX.....	up to 500 m
Supply voltage .....	230 VAC, 50-60 Hz
Standby power consumption.....	0.73 W
Maximum power consumption .....	1.37 W
Rated current (resistive load).....	10 A



*For load other than resistive, it should not exceed 3 A at 230 VAC. The power factor (cosφ) must be equal to or greater than 0.4.*

Complied with standards.....	EN 50130-4, EN 50130-5
Environmental class according to EN50130-5 .....	II
Operating temperature range.....	-10°C...+55°C
Maximum humidity .....	93±3%
Dimensions:	
ASW-200 E.....	ø45 x 67 mm
ASW-200 F.....	ø45 x 70 mm

Weight:

ASW-200 E ..... 60 g

ASW-200 F ..... 61 g