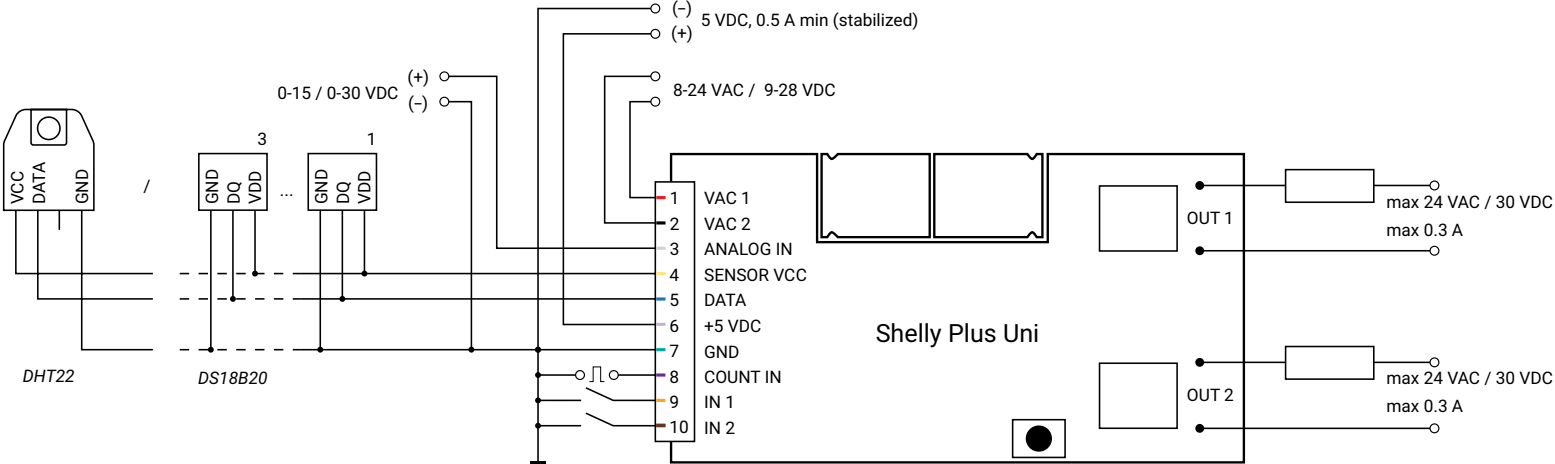


USER AND SAFETY GUIDE

Shelly Plus Uni



Read before use

This document contains important technical and safety information about the device, its safe use and installation.

CAUTION: Before you start the installation, read carefully and entirely this guide and any other documents accompanying the device. Failure to follow the installation procedures can lead to malfunction, danger to your health and life, violation of law, or refusal of legal and commercial guarantees (if any). Shelly Europe Ltd. is not responsible for any loss or damage in case of incorrect installation or improper operation of this device due to failure to follow the user and safety instructions in this guide.

Product Description

Shelly Plus Uni (the Device) is a small form factor smart universal module featuring two solid state relays with potential free contacts, pulse counter, analog and two digital inputs. It allows remote control of electrical devices via mobile phone, tablet, PC or home automation system. It can operate standalone on a local Wi-Fi network or it can also be controlled via cloud-based home automation services.

The Device can be accessed, controlled, and monitored remotely from any place where the User has internet connectivity, as long as the device is connected to a Wi-Fi router and the Internet.

Shelly Plus Uni has an embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.

NOTICE: The Device comes with factory-installed firmware. To keep it up-to-date and secure, Shelly Europe Ltd. provides the latest firmware updates free of charge. You can access the updates through either the embedded web interface or the Shelly Smart Control mobile application, where you can find details about the latest firmware version. The choice to install or not the firmware updates is the user's sole responsibility. Shelly Europe Ltd. shall not be liable for any lack of conformity of the Device caused by the failure of the user to install the available updates in a timely manner.

Legend

- **VAC1:** 8-24 VAC / 9-28 VDC power supply input
- **VAC2:** 8-24 VAC / 9-28 VDC power supply input
- **ANALOG IN:** Analog input
- **SENSOR VCC:** power supply for 1-Wire sensors output
- **DATA:** 1-Wire data signal
- **+5 VDC:** 5 VDC positive power supply input
- **GND:** Device ground
- **COUNT IN:** Counter input
- **IN 1:** Digital input 1
- **IN 2:** Digital input 2
- **OUT 1:** Solid-state relay 1 outputs
- **OUT 2:** Solid-state relay 2 outputs

Installation Instructions

WARNING! Danger of electrocution! Do not connect the Device to sources of voltage higher than the specified.

CAUTION! Use the Device only with a power supply and appliances that comply with all applicable regulations. A short circuit in any appliance connected to the Device may damage the Device.

CAUTION! Do not connect the Device to appliances exceeding the given max load!

CAUTION! Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.

CAUTION! When mounting the Device, make sure its PCB is not in contact with any conductive materials.

CAUTION! The Device is intended for indoor use only.

CAUTION! Keep the Device away from liquids and moisture. Do not use the device in places with high humidity.

CAUTION! Do not use the device if it shows any sign of damage or defect.

CAUTION! Do not attempt to service or repair the Device yourself.

CAUTION! The Device can control electric circuits and appliances wirelessly. Proceed with caution! Irresponsible use of the Device may lead to malfunction, danger to your life, or violation of the law.

Connect the Device according to the wiring diagram at the top of this guide. You can power the device via VAC 1 and VAC 2 using 8-24 VAC or 9-28 VDC. Alternatively, you can use stabilized 5 VDC (for example a standard USB port) via +5 VDC and GND.

You can connect to the Device simultaneously up to five DS18B20 temperature sensors or a single DHT22 temperature and humidity sensor.

You can also simultaneously measure voltage levels up to +30 VDC at ANALOG IN (with reference to GND), measure the frequency of the signal at COUNT IN and follow the status of IN 1 and IN 2.

NOTICE: COUNT IN, IN 1, and IN 2 are triggered by voltage level lower than 1.5 V.

Specifications

- Dimensions (LxWxH): 37x42x16 mm / 1.46x1.65x0.63 in (without the cables)
- Weight: 8.5 g / 0.3 oz
- Ambient temperature: -20 °C to 40 °C / -4 °F to 104 °F
- Humidity: 30 % to 70 % RH
- Power supply: 8-24 VAC / 9-28 VDC / 5 VDC (stabilized, via +5 VDC and GND)
- Power consumption: < 1 W
- Digital inputs resistance: 50 kΩ
- Digital inputs triggering voltage: 1.5 V (active low level)
- Max switching voltage: 30 V
- Max switching current: 300 mA
- Voltmeter: 0-15 VDC / 0-30 VDC (Two-range)
- Pulse counter input triggering voltage: 1.5 V (active low level)
- Pulse counter max frequency: 1 kHz
- External sensors supported: Single DHT22 or up to five DS18B20
- RF band: 2400 - 2495 MHz
- Max. RF power: < 20 dBm
- Wi-Fi protocol: 802.11 b/g/n
- Wi-Fi operational range (depending on local conditions):
 - up to 50 m / 160 ft outdoors
 - up to 30 m / 100 ft indoors
- Bluetooth protocol: 4.2
- Bluetooth operational range (depending on local conditions):
 - up to 30 m / 100 ft outdoors
 - up to 10 m / 33 ft indoors
- CPU: ESP32
- Flash: 4 MB
- Schedules: 20
- Webhooks (URL actions): 20 with 5 URLs per hook
- Scripting: Yes
- MQTT: Yes

Shelly Cloud Inclusion

If you choose to use the Device with the Shelly Smart Control mobile application and cloud service, instructions on how to connect the Device to the Cloud and control it through the Shelly Smart Control app can be found in the mobile application guide.

The Shelly mobile application and Shelly Cloud service are not conditions for the Device to function properly. This Device can be used standalone or with various other home automation platforms and protocols.

CAUTION! Do not allow children to play with the buttons/switches connected to the Device. Keep the devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

Declaration of conformity

Hereby, Shelly Europe Ltd. (former Allterco Robotics EOOD) declares that the radio equipment type Shelly Plus Uni is in compliance with Directive 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:

https://shelly.link/plus-uni_DoC

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Changes in the contact information data are published by the Manufacturer on the official website.

All rights to the trademark Shelly® and other intellectual rights associated with this Device belong to Shelly Europe Ltd.