Shelly Pro 1 V1

Shelly Pro 1 v.1 is a modification of Shelly Pro 1 (SPSW-001XE16EU)

Shelly Pro 1 v.0 is now obsolete and out of sale.
Download Shelly Pro 1 multi-language printed user manual.

Differences with Shelly Pro 1 v.0 are marked by the ≠ symbol in the text below.

Main changes:

- Power supply: no more 12 VDC option.
- Relay: no more DC switching

- Connectors: 3-terminal connectors are replaced by 2-terminal ones.
- PCBs: relay 2-layer PCBs are replaced by 4-layer ones for better thermal performance.
- LAN: improved high voltage electrical distances.
- Plastics shell: improved dielectric performance.

Device identification (≠)

- Device name: **Shelly Pro 1 v.1**
- Device model: **SPSW-201XE16EU**
- Device SSID: **ShellyPro1-XXXXXX**

Short description

Shelly Pro 1 is a DIN rail mountable smart switch with potential-free contacts. Enhanced with all the gen2 firmware flexibility and LAN connectivity, it provides professional integrators with many more options for end customer solutions. It can work standalone in a local Wi-Fi network or it can also be operated through cloud home automation services.

Shelly Pro 1 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 Pro 1 has an embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.

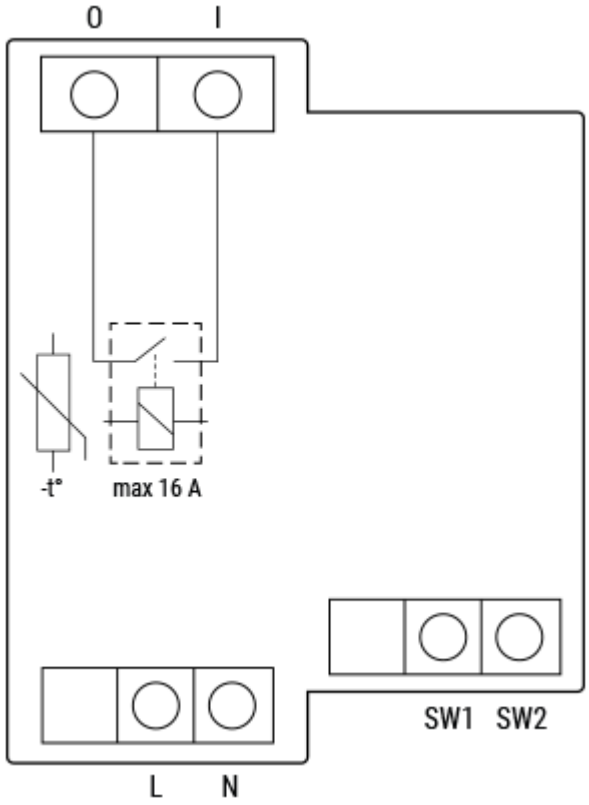
Main applications

- Residential
- MDU (Multi Dwelling Units - apartments, condominiums, hotels, etc.)
- Light commercial (small office buildings, small retail/restaurant/gas station, etc.)
- Government/municipal
- University/college

Integrations

- Google
- Alexa
- Samsung SmartThings

Simplified internal schematics (≠)



Device electrical interfaces

Inputs

- 2 switch/button inputs on screw terminals: **SW1** and **SW2**
- 2 power supply inputs on screw terminals: 1 **N** and 1 **L**
- 1 relay input: **I**

Outputs

- 1 relay output: **O**

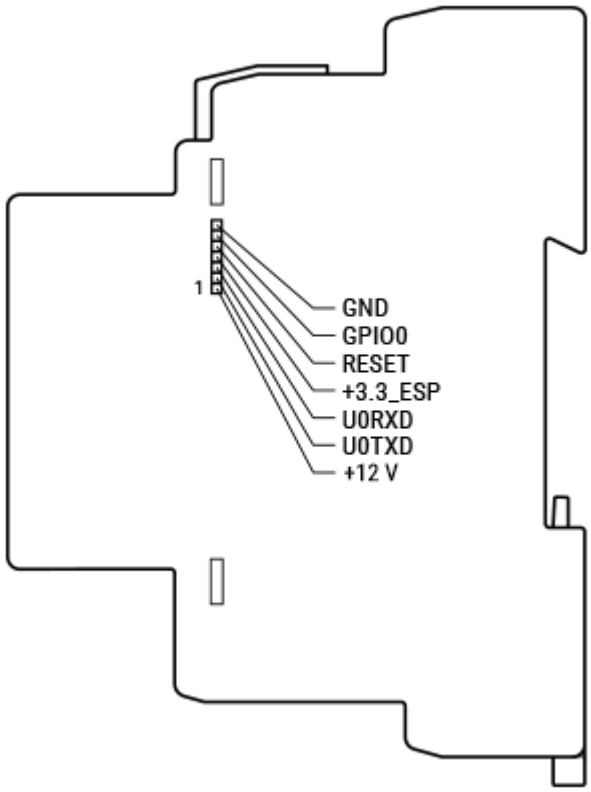
Ethernet port

- 1 RJ45 connector

⚠**CAUTION!** Plug in or unplug the LAN cable only when the Device is powered off! The LAN cable connector must not be metallic in the parts touched by the user to plug in or unplug the cable.

Add-on interface

- Shelly proprietary serial interface



⚠**CAUTION!** High voltage on the add-on interface when the Device is powered!

Connectivity

- Ethernet
- Wi-Fi
- Bluetooth

Safety features

- Overheating protection

Supported load types

- Resistive (incandescent bulbs, heating devices)
- Capacitive (capacitor banks, electronic equipment, motor start capacitors)
- Inductive with RC Snubber (LED light drivers, transformers, fans, refrigerators, air-conditioners)

User interface

Inputs

- One tactile dome button

    - Press and hold 5 sec to reboot.
    - Press and hold 10 sec to factory reset.

Outputs

- LED indication
    - Power (red): Red light indicator will be on if power supply is connected.
    - Wi-Fi (varies):
        - Blue light indicator will be on if in AP mode.
        - Red light indicator will be on if in STA mode and not connected to a Wi-Fi network.
        - Yellow light indicator will be on if in STA mode and connected to a Wi-Fi network. Not connected to Shelly Cloud or Shelly Cloud disabled.
        - Green light indicator will be on if in STA mode and connected to a Wi-Fi network and to the Shelly Cloud.
        - The light indicator will be flashing Red/Blue if OTA update is in progress.
    - LAN (green): Green light indicator will be on if LAN is connected.
    - Out (red): Red light indicator will be on if the Output relay is closed.

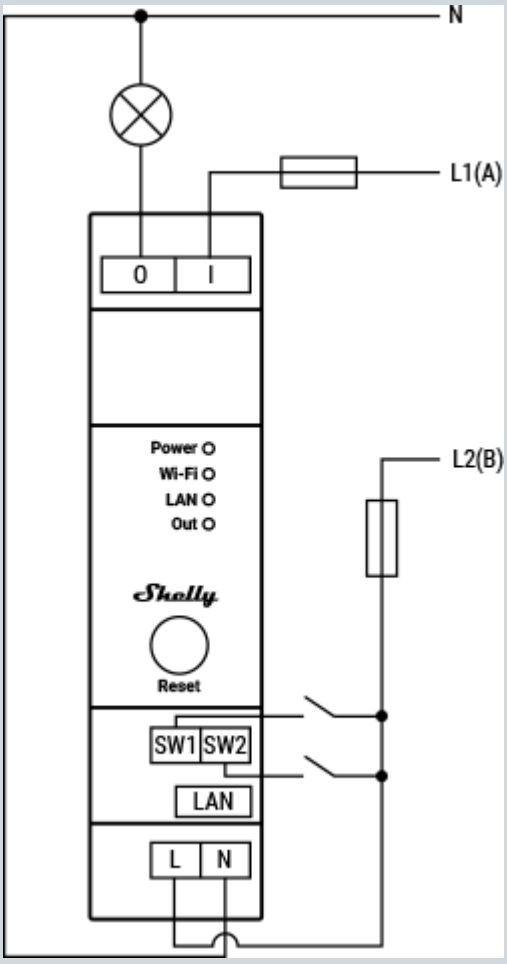
Specifications (≠)

Type	Value
Physical	
Size (HxWxD):	94x19x69 ±0.5 mm / 3.70x0.75x2.71 ±0.02 in
Weight:	63 g / 2.22 oz.
Mounting:	DIN rail
Screw terminals max torque:	0.4 Nm / 3.54 lbin
Conductor cross section:	0.5 to 2.5 mm² / 20 to 14 AWG (green connector) 0.5 to 1.5 mm² / 20 to 16 AWG (blue connectors)
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in (green connector) 5 to 6 mm / 0.20 to 0.24 in (blue connectors)
Shell material:	Plastic

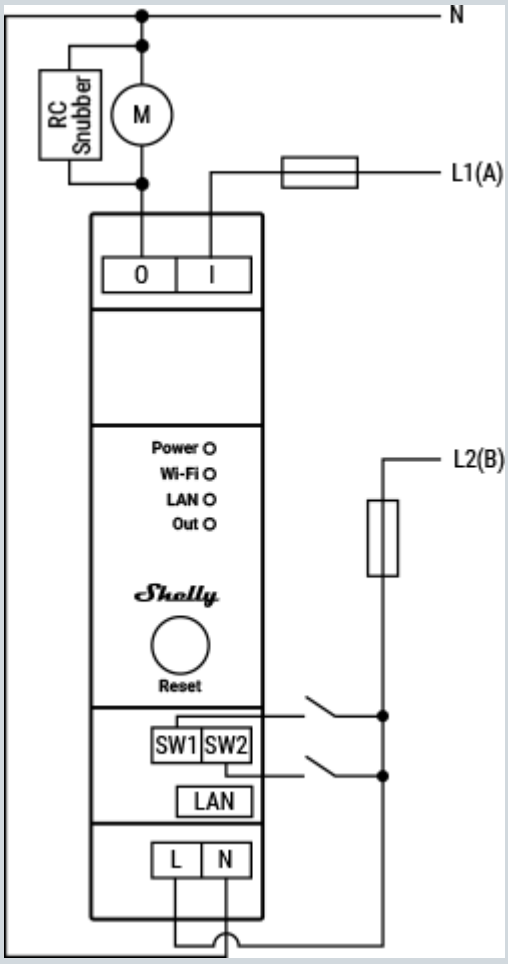
Color:	Blue
Environmental	
Ambient temperature:	-20 °C to 40 °C / -5 °F to 105 °F
Humidity	30 % to 70 % RH
Max. altitude	2000 m / 6562 ft
Electrical	
Power supply voltage AC:	110 - 240 V
Power supply voltage DC:	N/A
Power consumption:	< 3 W
Neutral not needed:	No
Output circuits ratings	
Max switching voltage AC:	240 V
Max switching voltage DC:	N/A
Max switching current AC:	16 A
Max switching current DC:	N/A
Sensors, meters	
Internal-temperature sensor:	Yes
Radio	
RF band:	2400 - 2495 MHz
Max. RF power:	<20 dBm
Wi-Fi protocol:	802.11 b/g/n
Wi-Fi Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth Protocol:	4.2
Bluetooth Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
MCU	

CPU:	ESP32-D0WDQ6
Flash:	8 MB
Firmware capabilities	
Schedules:	20
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	Yes
MQTT:	Yes
CoAP:	No

Basic wiring diagram (≠)



Resistive load



Inductive load and RC snubber

Legend

Terminals		Wires	
I	Load circuit input terminal	**L1(A)**	Load circuit live (110-240 V) wire
O	Load circuit output terminal	**L2(B)**	Device power supply live (110-240 V) wire
SW1, **SW2**	Switch/button input terminals	**N**	Neutral wire
L	Live (110-240 V) terminal		
N	Neutral terminal		
LAN	Local Area Network RJ 45 connector		

Shelly Smart Control

- Adding the device to the Shelly Smart Control

Shelly Web user interface

- Shelly Pro 1 Web user interface guide

Troubleshooting

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Web Interface guide

Read the Shelly Pro 1 web interface guide

Components and APIs

- This device
- All Shelly devices and services

Printed user guide

- Shelly Pro 1 multilingual printed user and safety guide.pdf
- Ръководство за употреба и безопасност

Compliance

- Shelly Pro 1 multilingual EU declaration of conformity 2025-07-22.pdf
- Shelly Pro 1 UK PSTI ACT Statement of compliance.pdf
- Shelly PRO 1&PRO 2 AU NZ Certificate for Suitability.pdf

Compliance archive

Shelly Pro 1 multilingual EU declaration of conformity 7-1 2022-08-22.pdf

Installation guides

- Using Shelly Pro 1/1PM V1 with multiple switches to control lights
- Using Shelly Pro 1/1PM V1 with multiple buttons to control lights
- Using Shelly Pro 1 V1 and a contactor for load shedding