Device identification

- Device name: **Shelly Pro 3**
- Device model: **SPSW-003XE16EU**
- Device SSID: **ShellyPro3-XXXXXX**

Short description

Shelly Pro 3 is a DIN rail mountable 3-channel smart relay with potential-free contacts, capable of switching 3 completely independent circuits, including 3-phase ones. 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 3 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 3 has an embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.
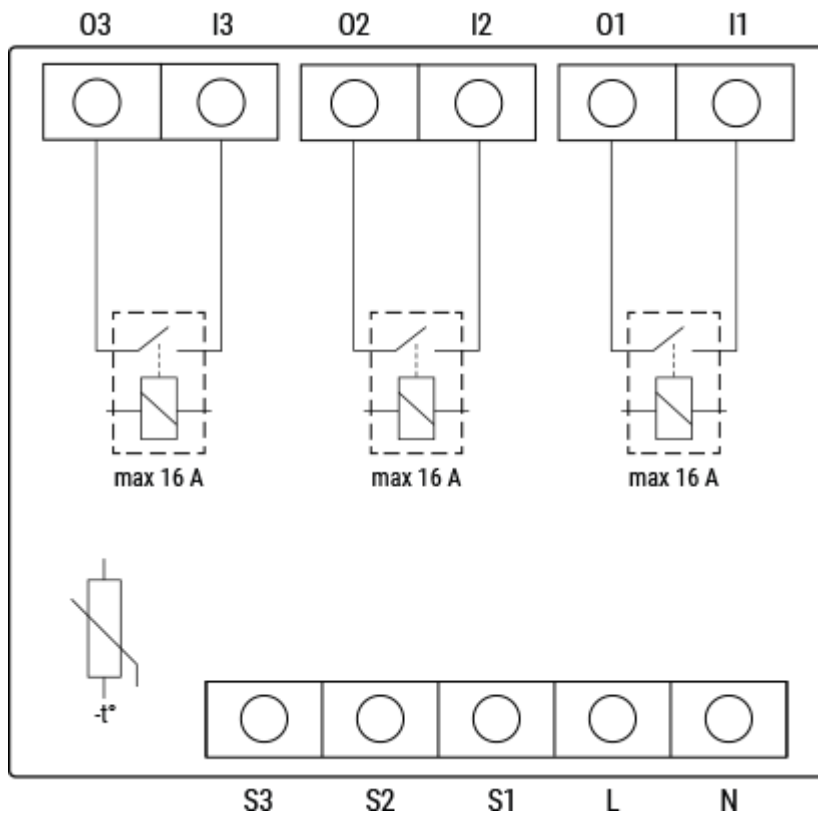
Main applications

- Residential
- MDU (Multi Dwelling Units – apartments, condominiums, hotels, etc.)
- Light commercial (small office buildings, small retail/restaurant/gas station, etc.)
- Industrial (factories, power plants, water processing, refineries, etc.)
- Government/municipal
- University/college

Integrations

- Google
- Alexa
- Samsung SmartThings

Simplified internal schematics

Device electrical interfaces

Inputs

- 3 switch/button inputs on screw terminals: **S1, S2** and **S3**
- 2 powers supply inputs on screw terminals: 1 **N** and 1 **L**
- 3 relay inputs: **I1, I2** and **I3**

Outputs

- 3 relay outputs: **O1, O2** and **O3**

Ethernet port

- 1 RJ45 connector

Connectivity

- Wi-Fi
- Ethernet
- Bluetooth (for inclusion purposes)

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 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 1 (red): Red light indicator will be on if the Output 1 relay is closed.

- Out 2 (red): Red light indicator will be on if the Output 2 relay is closed.
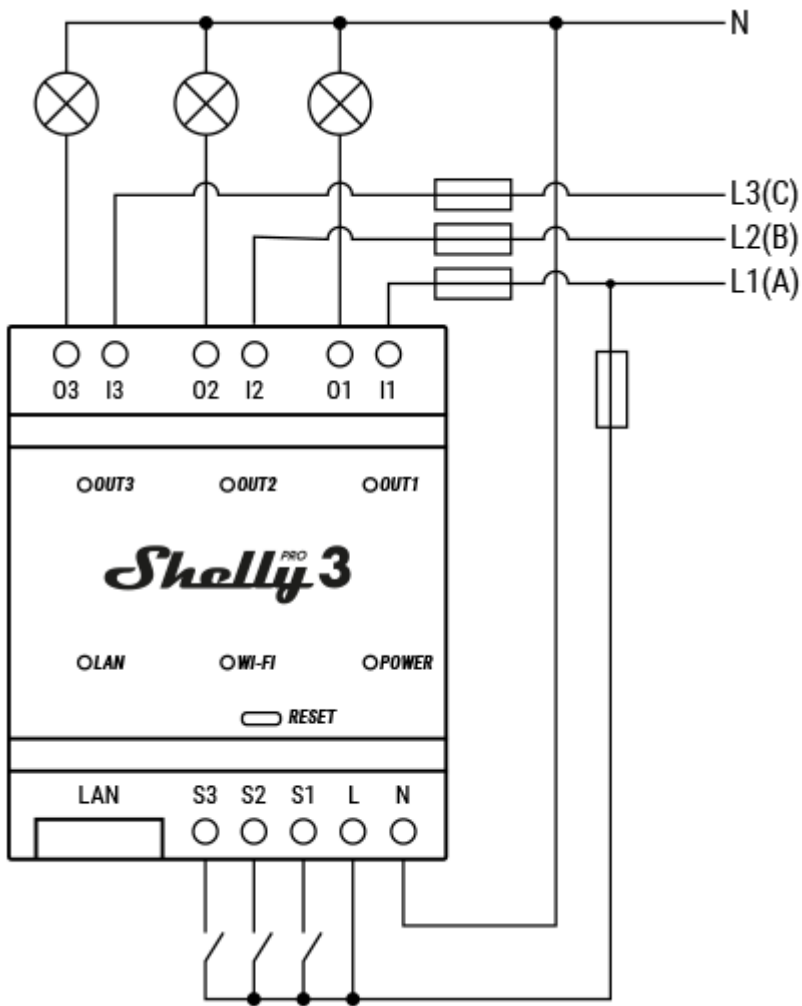- Out 3 (red): Red light indicator will be on if the Output 3 relay is closed.

Specifications

Type	Value
Physical	
Size (HxWxD):	96x53x59 mm / 3.78×2.01×2.32 inch
Weight:	0.175 kg
Mounting:	DIN rail
Screw terminals max torque:	0.4 Nm / 4.43 lbin
Conductor cross section:	0.5 to 2.5 mm² / 20 to 14 AWG
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 inch
Shell material:	Plastic
Color:	Black
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:	30 V
Max switching current AC:	16 A per channel, 48 A total
Max switching current DC:	16 A per channel, 48 A total

Sensors, meters

Temperature sensor:	Yes

Radio

Wi-Fi

Protocol:	802.11 b/g/n

Frequency:	2412 – 2472 MHz; (Max. 2495 MHz)
Max. RF output power:	13.35 dBm
Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth	
Protocol:	BLE 4.1
Frequency:	2402 – 2480 MHz (Max. 2483.5 MHz)
Max. RF output power:	4.25 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
MCU	
CPU:	ESP32
Flash:	8 MB
Firmware capabilities	
Schedules:	20
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	mJS
MQTT:	Yes
CoAP:	No

Basic wiring diagram

Legend

Terminals		Cables	
I1, **I2**, **I3**	Load circuit input terminals	**L1(A)**	Load circuit 1 live (110-240 V) cable
O1, O2, O3	Load circuit output terminals	**L2(B)**	Load circuit 2 live (110-240 V) cable
S1, S2, S3	Switch/button input terminals	**L3(C)**	Load circuit 3 live (110-240 V) cable

L	Live (110-240 V) terminal	N	Neutral cable
N	Neutral terminal		
LAN	Local Area Network RJ 45 connector		