

Shelly Pro 4PM V2



Shelly Pro 4PM V2 is a modification of Shelly Pro 4PM V1 (SPSW-004PE16EU)

Differences with Shelly Pro 4PM V1 are marked by the ≠ symbol in the text below.

Main changes:

- Connectors: The four 2-terminal load connectors have been replaced by 5 individual screw terminals.
- LAN: improved high voltage electrical distances.

Device identification (≠)

- Device name: **Shelly Pro 4PM V2**
- Device model: **SPSW-104PE16EU**
- Device SSID: **ShellyPro4PM-XXXXXX**

Short description

Shelly Pro 4PM is a DIN rail mountable four-channel smart switch with power measurement capabilities. Enhanced with all the gen2 firmware flexibility, LAN connectivity and color graphic display, 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 4PM 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 4PM has an embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.

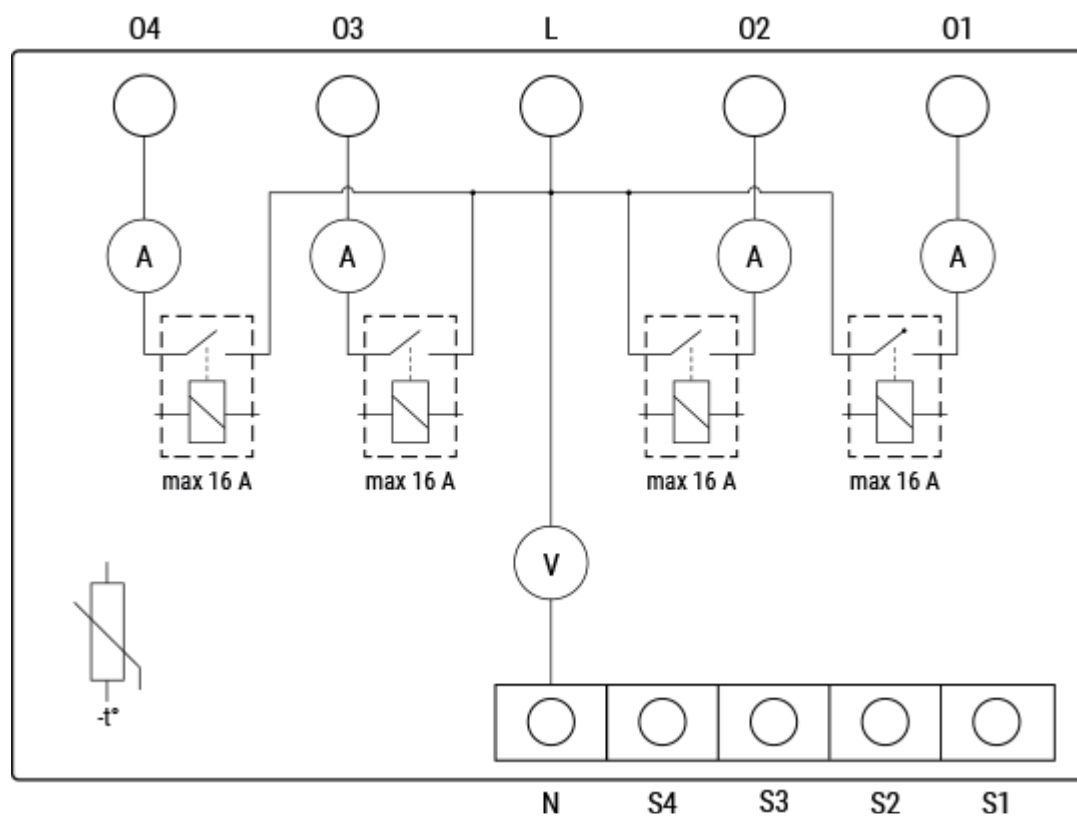
Main applications

- 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

- 4 switch/button inputs on screw terminals: **S1**, **S2**, **S3**, and **S4**
- 2 power supply inputs on screw terminals: 1 **N** and 1 **L**

Outputs

- 4 relay outputs: **01**, **02**, **03**, and **04**

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.

Connectivity

- Ethernet
- Wi-Fi
- Bluetooth

Safety features

- Overheating protection
- Overvoltage protection
- Overcurrent protection
- Overpower 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

Three press buttons on the front plate:

- Left button:
 - Press to scroll up in the currently displayed menu
- Middle button:
 - Press to scroll down in the currently displayed menu
- Right button:
 - Press to wake up the Device display
 - Press and hold to get into the menu screen
 - Press to select a menu item
 - Press and hold while in a sub menu to move to the Main menu

Outputs

Color LCD.

The LCDs a top bar with short status information:

- Time
- Bluetooth connection status
 - Disabled - no icon
 - Enabled - blue icon
- LAN status:
 - Disabled - no icon
 - Enabled, but not connected - red icon
 - Connected - green icon
- Wi-Fi STA status:
 - Disabled - no icon
 - Enabled, but not connected - red icon
 - Connected - green icon
- Wi-Fi AP status:
 - Disabled - no icon
 - Enabled, but not connected - red icon
 - Connected - green icon
- Cloud status:
 - Disabled - no icon
 - Enabled, but not connected - red icon
 - Connected - green icon

The rest of the LCD is used to display the Device menu screens:

- Main (default) screen:
 - Output 1 on/off
 - Output 2 on/off
 - Output 3 on/off
 - Output 4 on/off
- Network:
 - Wi-Fi AP enable/disable
 - Wi-Fi enable/disable
 - Ethernet enable/disable
 - Bluetooth enable/disable
- Status:

Displays complete status information
- Maintenance
 - Wi-Fi reset
 - Factory reset

- Reboot

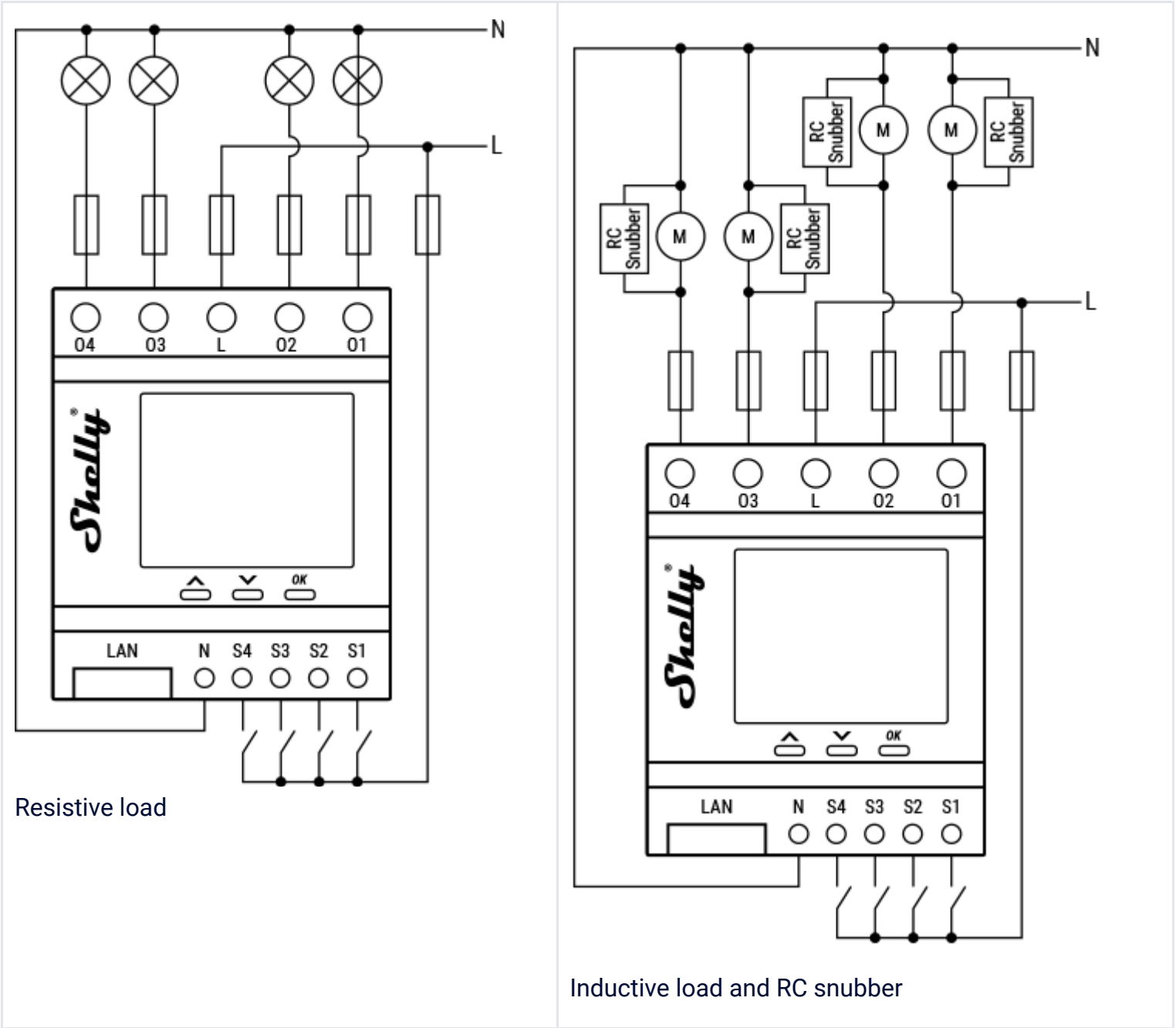
Specifications



Type	Value
Physical	
Size (HxWxD):	96x53x59 ±0.02 mm / 3.78x2.01x2.32 ±0.02 in
Weight:	
Mounting:	DIN rail
Screw terminals max torque:	• 0.4 Nm / 3.5 lbin (bottom connectors) • 1.5 Nm / 13.2 lbin (top connectors)
Conductor cross-section:	• 0.5 to 2.5 mm² / 20 to 14 AWG (bottom connectors) • 1.5 to 6 mm² / 15 to 10 AWG (top connectors)
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in
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:	< 4 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 per channel, 40 A total

Max switching current DC:	N/A
Sensors, meters	
Voltmeter (AC)	Yes
Ammeter (AC)	Yes
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 (≠)



Legend



Terminals		Wires	
01, 02, 03, 04	Load circuit output terminals	L	Live (110-240 V) wire
S1, S2, S3, S4	Switch/button input terminals	N	Neutral wire
L	Live (110-240 V) terminals		
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 4PM Web user interface guide](#)