Knowledge Base / Devices / Shelly Pro devices

Shelly Pro Dual Cover/Shutter PM

Device identification

- Device name: **Shelly Pro Dual Cover/Shutter PM**

- Device model: **SPSH-002PE16EU**

- Device SSID: **ShellyPro2Cover-XXXXXX**

Short description

Shelly Pro Dual Cover/Shutter PM (the Device) is a DIN rail mountable smart dual cover c̶

with power measurement capabilities. Enhanced with all the `gen2` firmware flexibility and

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 Dual Cover PM 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 Dual Cover PM 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

Simplified internal schematics
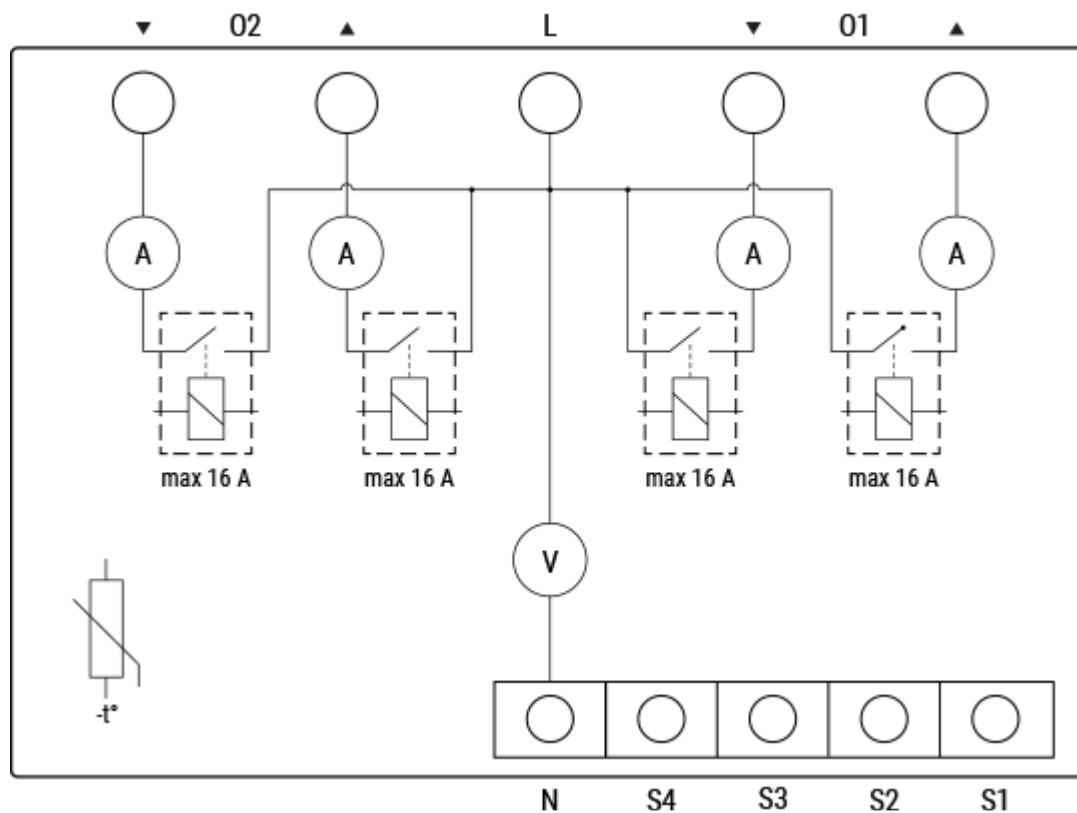
Device electrical interfaces

Inputs

- 4 switch/button inputs on screw terminals: **S1**, **S2, S3, S4**

- 2 power supply inputs on screw terminals: 1 **N** and 1 **L**

Outputs

- 4 relay outputs: ▲ and ▼ of **O1**, ▲ and ▼ of **O2**

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

- Wi-Fi

- Ethernet

- Bluetooth

Safety features

- Overheating protection

- Overvoltage protection

- Overcurrent protection

- Overpower protection

Supported load types

- Bi-directional AC motors with RC Snubbers

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 up 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 go back

Outputs

Color LCD.
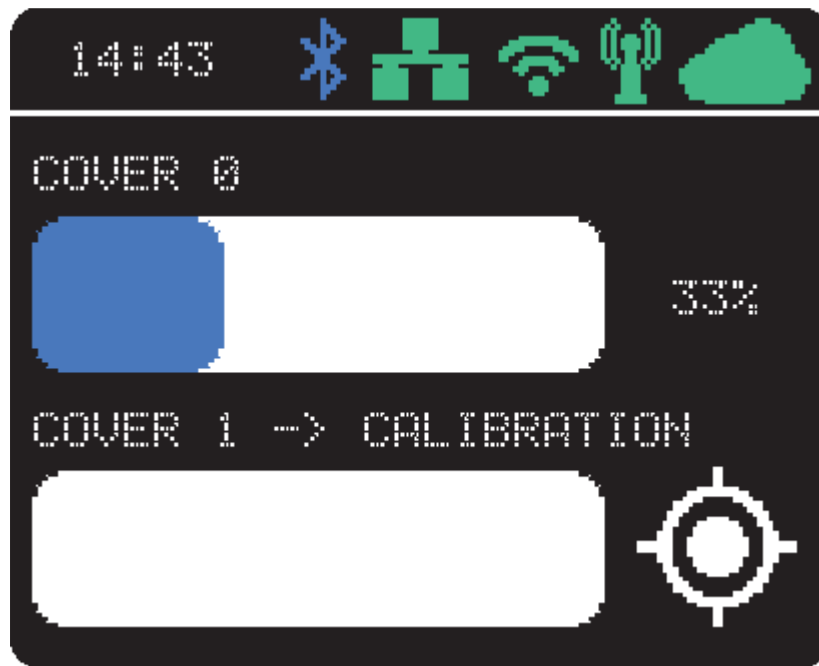
The LCD top bar displays short status information:

- 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 displays for each cover:

  - Name of the cover (can be changed in the device settings).

  - Slider, which visualizes the position of the cover.

  - Notification area, which shows the position of the covers in percentage or an icon indicating an event (calibration, obstruction, overvoltage, overcurrent, or overpower). The events are also transcribed next to the cover name.

- Network:

  - Wi-Fi AP enable/disable

  - Wi-Fi STA 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:	150 g / 5.30 oz	
Mounting:	DIN rail	
Screw terminals max torque:	0.4 Nm / 3.5 lbin (green connectors)	
Conductor cross section:	0.5 to 2.5 mm² / 20 to 14 AWG (green connectors)	
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in (green connectors)	
Shell material:	Plastic	
Color:	Dark gray	
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 per output	
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
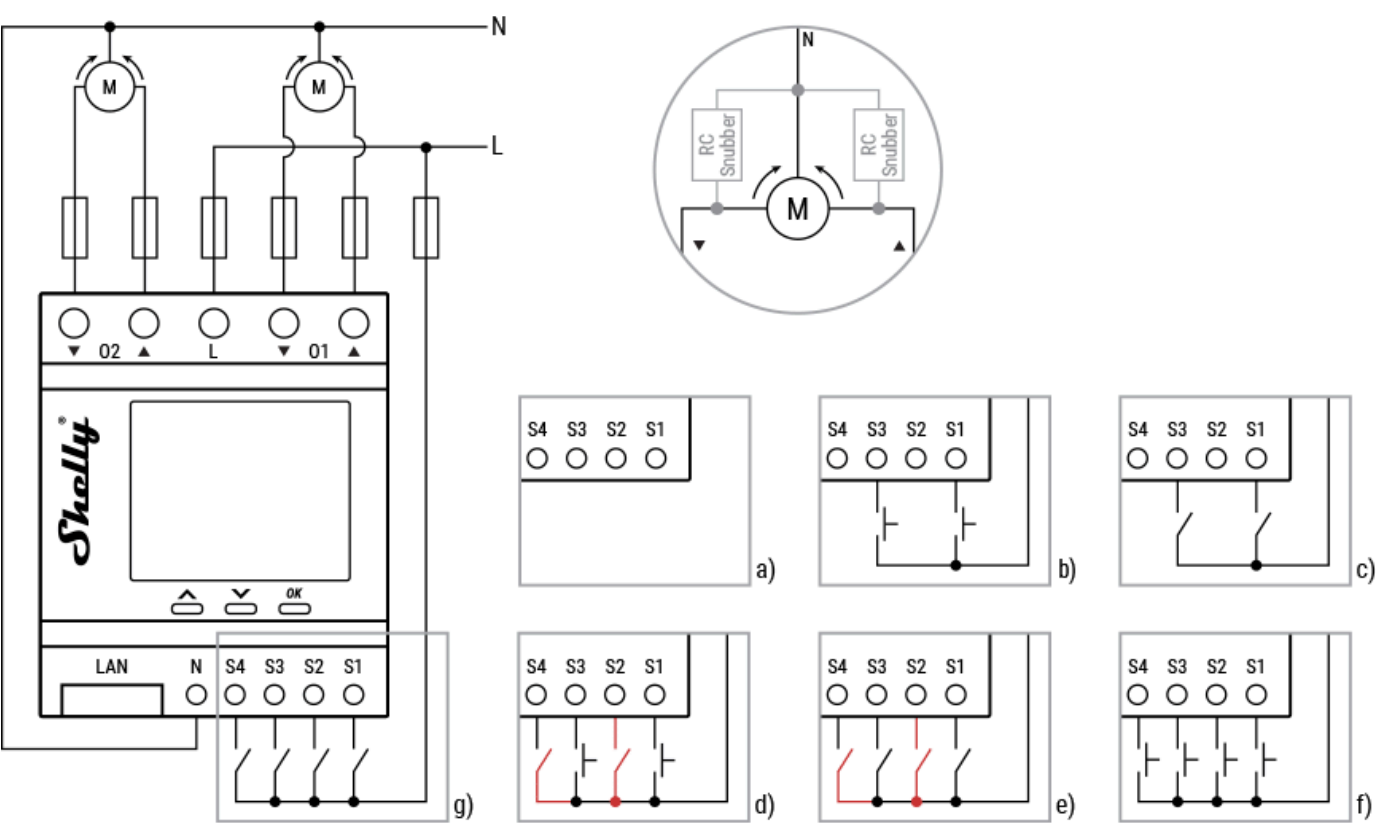
Legend

Terminals		Wires	
O1, O2	Cover 1 and Cover 2 output terminal pairs	**L**	Live (110-240 V) wire

Terminals		Wires	
▲, ▼	Cover direction output terminals	N	Neutral wire
S1, S2	Switch/button input terminals for controlling Cover 1		
S3, S4	Switch/button input terminals for controlling Cover 2		
L	Live (110-240 V) terminal		
N	Neutral terminal		
LAN	Local Area Network RJ 45 connector		

Troubleshooting

...

Components and APIs

- This device

- All Shelly devices and services

Compliance

- Shelly Pro Dual Cover Shutter PM multilingual EU declaration of conformity.pdf

- Shelly Pro Dual Cover PM UK PSTI ACT Statement of compliance.pdf

Printed user guide

- [Shelly Pro Dual CoverShutter PM multilingual printed user guide.pdf](#)

Privacy policy / Cookie policy / Support / FB community support / Contact us