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Shelly 1PM Mini Gen4

Device identification

- Device name: **Shelly 1PM Mini Gen4**

- Device model: **S4SW-001P8EU**

- Device SSID: **Shelly1PMMiniG4-XXXXXXXXXXXX**

- BLE model ID: **0x1031**

Short description

Shelly 1PM Mini Gen4 is a small form factor smart switch with power measurement, which allows remote control of electric appliances through a mobile phone, tablet, PC, or home automation system. It can work standalone in a local Wi-Fi network or it can also be operated through cloud home automation services. The device is an improved version of Shelly 1PM Mini Gen3 with with a more advanced processor and Zigbee connectivity.

Shelly 1PM Mini Gen4 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.

It can be retrofitted into standard electrical wall boxes, behind power sockets and light switches or other places with limited space.

Shelly 1PM Mini Gen4 has embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.
The device has multi-protocol wireless MCU which provide Zigbee and Bluetooth connectivity ensuring a secure connection.

This device is compatible with Matter.

Main features

- **Smart Switch with Power Measurement:** Acts as a smart switch with the added capability of measuring power consumption, allowing you to monitor the energy usage of connected appliances.

- **Compact Design:** Designed as a small form factor switch, making it suitable for retrofitting into standard electrical wall boxes, behind power sockets, light switches, or other confined spaces.

- **Remote Control:** Enables remote control of electric appliances via a mobile phone, tablet, PC, or home automation system.

- **Local and Cloud Control:** Can function independently in a local Wi-Fi network and can also be operated through cloud home automation services.

- **Zigbee Connectivity:** Zigbee is available for inclusion purposes, which may be useful during the setup process.

- **Improved Processor:** Upgraded with an improved processor and Zigbee connectivity for enhanced performance.

- **Remote Access:** Allows remote access, control, and monitoring from any location with internet connectivity, provided the device is connected to a Wi-Fi router and the internet.

- **Embedded Web Interface:** Features an embedded web interface for monitoring, control, and adjustment of settings.

- **BLE Gateway:** Bridge between your Shelly BLU devices and the wider Shelly ecosystem. It receives Bluetooth signals and sends them to the cloud or locally to another non-Bluetooth device.

- **Zigbee Range extender for IoT devices:** A Zigbee extender is employed to expand the reach of your Zigbee network by receiving your Zigbee signal, enhancing its strength, and then transmitting the enhanced signal over a wider area.

- **Wi-Fi Range extender for IoT devices:** A Wi-Fi extender is employed to expand the reach of your Wi-Fi network by receiving your current Wi-Fi signal, enhancing its strength, and then transmitting the enhanced signal over a wider area.

- **Scripting:** https://shelly-api-docs.shelly.cloud/gen2/Scripts/ShellyScriptLanguageFeatures/

- **Wide range of integrations:** The device can be integrated with 3rd party home systems, documented HTTP API, MQTT(s), Web Hooks over HTTP and HTTPS, UDP

- **KNX:** Supports KNXnet/IP communication

- **Schedules:** Allows scheduling of complex operations to be executed in predefined time window. Users can specify time windows based on date, time of day, weekdays, hours, minutes and seconds.

- **Virtual Components:** https://shelly-api-docs.shelly.cloud/gen2/DynamicComponents/Virtual/

- **KNX net/IP support:** https://shelly-api-docs.shelly.cloud/gen2/Integrations/KNX/

Use cases

- **Appliance Control:** Use it to remotely control and automate the operation of various electric appliances such as lights, fans, or other devices.

- **Power Monitoring:** Monitor the power consumption of connected appliances in real-time. This is useful for understanding energy usage patterns and promoting energy efficiency.

- **Home Automation:** Integrate the Shelly 1PM Mini Gen4 into your home automation system to create custom scenes and schedules for your devices.

- **Energy Efficiency:** Leverage the power measurement feature to identify energy-hungry appliances and make informed decisions to improve overall energy efficiency in your home.

- **Remote Monitoring:** Keep an eye on your devices even when you're away from home. The remote access feature allows you to monitor and control connected appliances from anywhere with internet connectivity.

- **Space-Constrained Installations:** The compact design makes it suitable for retrofitting into standard electrical wall boxes, making it a good choice for installations with limited space.

Integrations

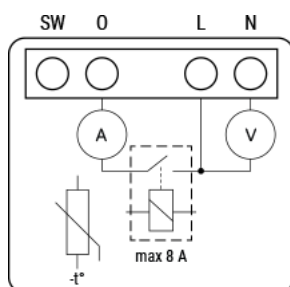### Amazon Alexa supported capabilities

Yes

Google Smart Home supported traits

Yes

Samsung SmartThings supported capabilities

Yes

Simplified internal schematics

Device electrical interfaces

Inputs

- 1 switch/button input on screw terminal

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

Outputs

- 1 relay output with power measurement on screw terminal

Connectivity

- Wi-Fi

- Bluetooth

- Zigbee

Safety functions

- 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 (LED light drivers, transformers, fans, refrigerators, air-conditioners)

User interface

Inputs

- One (Control) button

  - Press and hold for 5 seconds to enable Device access point and Bluetooth connection.

  - Press and hold for 10 seconds to factory reset the Device.

  - Press 5 consecutive times to switch the Device from Matter firmware (default) to Zigbee.

  - Press 3 consecutive times to put the Device in Zigbee inclusion mode. The Device stays in this mode for 2 minutes and you can find it in the Home Automation platform through the Zigbee Hub.

Outputs

- LED (monocolor) indication

  - AP (Access Point) enabled and Wi-Fi disabled:
    1 second ON / 1 second OFF

  - Wi-Fi enabled, but not connected to a Wi-Fi network:
    1 second ON / 3 seconds OFF

  - Connected to a Wi-Fi network:
    Constantly ON

  - Cloud is enabled, but not connected:
    1 second ON /5 seconds OFF

- Connected to Shelly Cloud:
  Constantly ON

- OTA (Over the Air Update):
  ½ sec ON / ½ second OFF

  - Button pressed and held for 5 seconds:
    ½ second ON / ½ second OFF

  - Button presses and held for 10 seconds:
    ¼ second ON / ¼ second OFF

The list above starts with the initial device status and the lowest priority. Every next state cancels the previous one.

Specifications

Quantity	Value
Physical	
Size (HxWxD):	29x34x16 ±0.5 mm / 1.34x1.11x0.63 ±0.02 inch
Weight:	18 ±1 g / 0.63 ±0.04 oz
Screw terminals max torque:	0.4 Nm / 3.5 lbin
Conductor cross section:	0.2 to 2.5 mm² / 24 to 14 AWG (solid, stranded, and bootlace ferrules)
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in
Mounting:	Wall box
Shell material:	Plastic
Shell color:	Red, C-3%; M-100%; Y-70%; K-12%
Connectors color:	Grey (Mouse Grey)
Environmental	
Ambient working 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:	110 - 240 V~
Relay:	NO contact, 1-pole, μ contact
External protection:	Tripping characteristic B or C, max. 10A max. rated current, min. 6 kA interrupting rating, energy limiting class 3

Output circuits ratings

Max. switching voltage:	240 V~
Max. switching current:	8A/240 V~
Power measurement:	Yes
Voltage protection / Cutoff:	Yes
Current protection / Cutoff:	Yes
Max power protection / Cutoff:	Yes

Sensors, meters

Internal-temperature sensor:	Yes

Radio

Wi-Fi

Protocol:	802.11 b/g/n/ax
RF band:	2412 - 2472 MHz
Max. RF power:	‹ 20 dBm
Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)

Bluetooth

Protocol:	5.0

RF band:	2402 - 2480 MHz
Max. RF power:	‹ 4 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
Zigbee	
Protocol:	802.15.4
RF bands:	2400 to 2483.5 MHz
Max. RF power:	‹ 20 dBm
Range:	Up to 100 m / 328 ft indoors and 300 meters / 984 ft outdoors (Depends on local conditions)
Microcontroller unit	
CPU:	ESP-Shelly-C68F
Flash:	8MB
Firmware capabilities	
Schedules:	20
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	Yes
MQTT:	Yes

Basic wiring diagrams
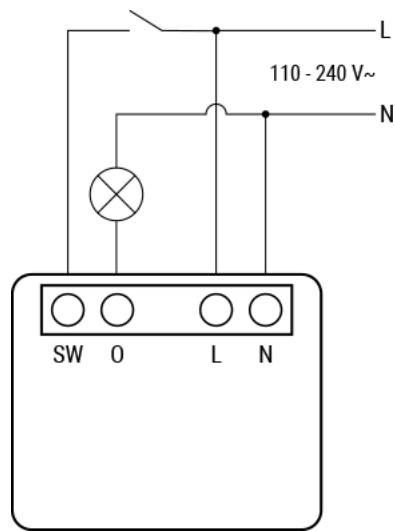
Legend

Terminals		Wires	
SW	Switch (controlling O) input terminal	L	Live (110 - 240 V~) wire
O	Load circuit output terminal	N	Neutral wire
L	Live (110-240 V) terminal		
N	Neutral terminal		

Components and APIs

- This device
- All Shelly devices and services

Compliance

Shelly 1PM Mini Gen4 multilingual EU declaration of conformity 2025-07-21.pdf

Shelly 1PM Mini Gen4 UK PSTI ACT Statement of compliance.pdf

Compliance archive

Shelly 1PM Mini Gen4 multilingual EU declaration of conformity 78 2025-03-14.pdf

Printed user guide

Shelly 1PM Mini Gen multilingual printed user and safety guide.pdf

- Ръководство за употреба и безопасност

Installation guides

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