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Shelly PM Mini Gen3



Device identification

- Device name: **Shelly PM Mini Gen3**
- Device model: **S3PM-001PCEU16**
- Device SSID: **ShellyPMMiniG3-XXXXXX**
- BLE model ID: **0x1023**

Short description

Shelly PM Mini Gen3 is a small form factor power meter. Enhanced with all the gen2 firmware flexibility, it provides professional integrators with additional 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 through MQTT, HTTP, and WebSocket. All inbound connections support TLS. The device is an improved version of Shelly Plus PM Mini with a more advanced processor and increased memory.

Shelly PM Mini Gen3 can be accessed, set up, and monitored remotely by the User, as well as the Device can access and communicate with an automation system, as long as they are in the

same network infrastructure.

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

Main features

- **Power Meter:** Designed as a small form factor power meter, allowing you to monitor the power consumption of connected devices.
- **Enhanced Firmware Flexibility:** Inherits the flexibility of gen2 firmware, providing professional integrators with additional options for end-customer solutions.
- **Compact size:** PM Mini Gen3 can be connected in very tiny spaces, unreachable for other devices.
- **Improved Processor and Memory:** Upgraded with an improved processor and increased memory for enhanced performance.
- **Remote Access:** Can be accessed, set up, and monitored remotely by the user, as well as communicate with an automation system within the same network infrastructure.
- **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.
- **WiFi Range extender for IoT devices:** A WiFi extender is employed to expand the reach of your WiFi network by receiving your current WiFi 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

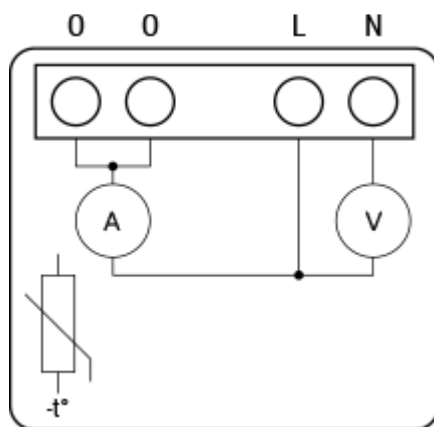
Use cases

- **Power Consumption Monitoring:** The primary purpose is to monitor the power consumption of connected devices in real-time. This information can be valuable for

understanding energy usage patterns and making informed decisions to reduce consumption.

- **Energy Efficiency Optimization:** Identify energy-hungry appliances and optimize their usage to improve overall energy efficiency in your home or workspace.
- **Appliance Health Check:** Keep track of the power usage of individual appliances to assess their health and performance over time. Sudden spikes or changes in power consumption may indicate issues with the appliance.
- **Cost Management:** With the knowledge of power consumption, you can estimate the cost of running specific devices and manage your electricity expenses more effectively.
- **Space-Efficient Retrofitting:** Integrate the device into standard electrical wall boxes, behind power sockets, light switches, or other locations with limited space.
- **Remote Monitoring:** Like the Shelly 1PM Mini Gen3, the PM Mini Gen3 also supports remote access. This allows you to monitor power consumption even when you're away from home.

Simplified internal schematics



Device electrical interfaces

Inputs

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

Outputs

- 2 load circuit outputs (bridged internally): 2 **O**

Connectivity

- Wi-Fi
- Bluetooth

Safety function

- Internal temperature sensing and reporting

Supported load types

- Resistive (incandescent bulbs, heating devices)
- Capacitive (LED light drivers, capacitor banks, electronic equipment, motor start capacitors)
- Inductive (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.

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



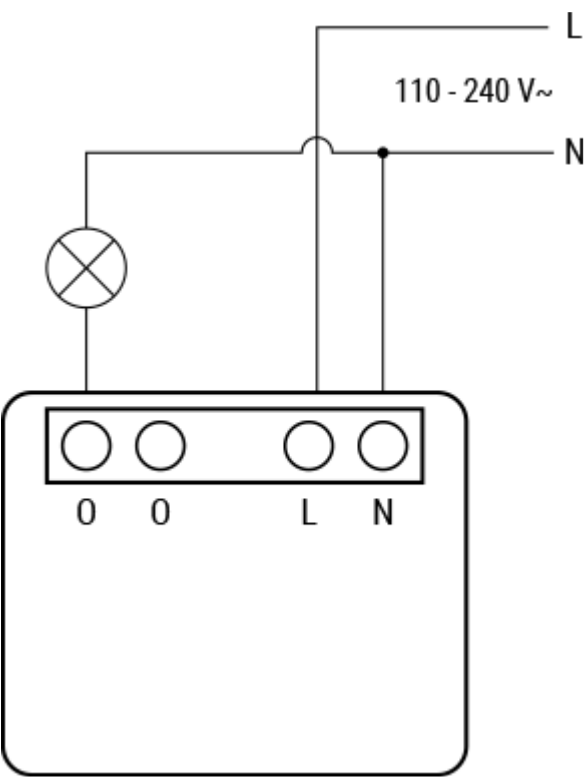
Quantity	Value
Physical	
Size (HxWxD):	29x34x16 / 1.34x1.11x0.63 in
Weight:	13 g / 0.46 oz
Screw terminals max torque:	0.4 Nm / 3.5 lbin
Conductor cross section:	0.2 to 2.5 mm² / 24 to 14 AWG (solid, stranded, and bootlace ferrules)

Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in
Mounting:	Wall box
Shell material:	Plastic
Shell color:	Light gray, C: 0%; M: 0%; Y: 0%; K: 20%
Terminal Color:	Black
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 VAC
Power consumption:	< 1.2 W
External protection:	Tripping characteristic B or C, max. 16A max. rated current, min. 6 kA interrupting rating, energy limiting class 3
Output circuits ratings	
Power measurement:	Yes
Max. measurement voltage:	240 VAC
Max. measurement current:	16 A
Max. measurement power:	3840 W
Radio	

Wi-Fi	
Protocol:	802.11 b/g/n
RF band:	2401 - 2495 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:	4.2
RF band:	2400 - 2483.5 MHz
Max. RF power:	< 4 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
Microcontroller unit	
CPU:	ESP-Shelly-C38F
Flash:	8 MB
Firmware capabilities	
Schedules:	20
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	Yes
MQTT:	Yes
UDP:	Yes

Advanced schedules:	Yes
KVS (Key-Value Store):	Yes

Basic wiring diagrams



Legend



Terminals		Wires	
O	Load circuit output terminals (bridged internally)	L	Live (110-240 V) wire
L	Live (110-240 V) terminal	N	Neutral wire
N	Neutral terminal		

Components and APIs

- [This device](#)
- [All Shelly devices and services](#)

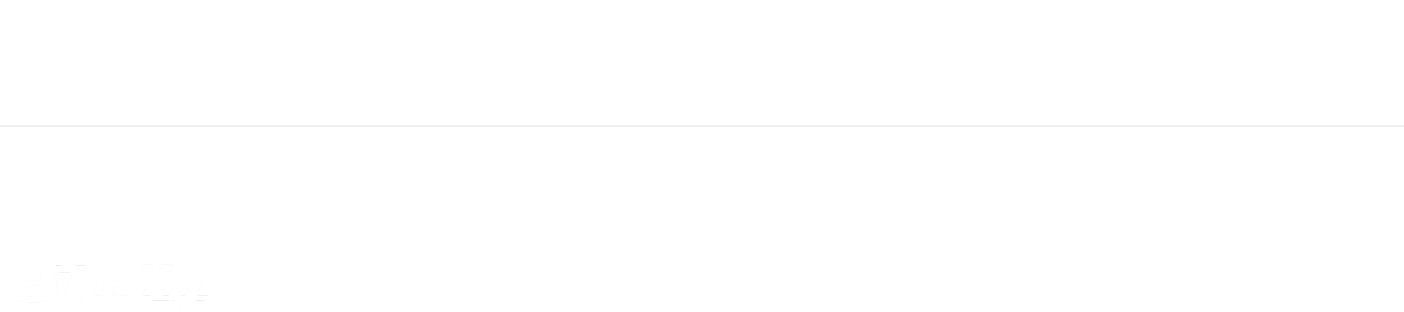
Compliance

- [Shelly PM Mini Gen3 multilingual EU declaration of conformity.pdf](#)
- [Shelly Mini PM Gen3 UK PSTI ACT Statement of compliance.pdf](#)
- [Shelly Mini PM Gen3 x2 UK PSTI ACT Statement of compliance.pdf](#)

Printed user guide

- [Shelly PM Mini Gen3 multilingual printed user and safety guide.pdf](#)

Installation guides



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