# Shelly EM




## Downloads

### Manuals

User and Safety Guide

Ръководство за употреба и безопасност

## Compliance

- Shelly EM multilingual EU declaration of conformity 245 2025-12-05.pdf
- Shelly EM + 50A UK PSTI ACT Statement of compliance.pdf
- Shelly EM AU NZ Certificate for Suitability .pdf

Compliance archive ›

## What is Shelly EM?

### 365 day built-in energy history

We developed Shelly EM to allow you to monitor the status and history, as well as the current and past electrical power consumption for the day, week, month or year.

### Features

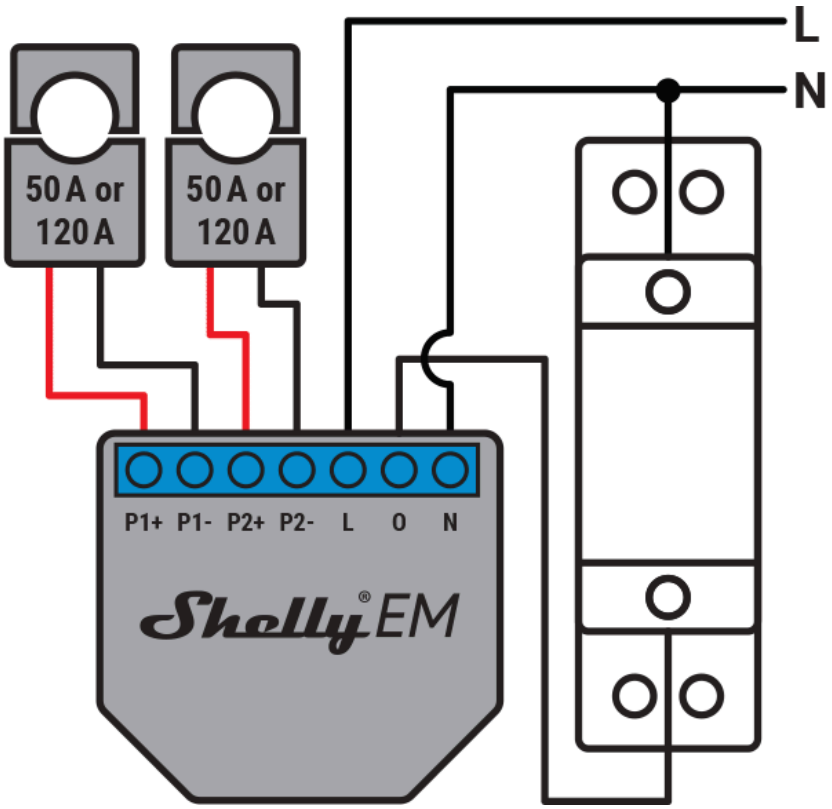
- No HUB required.
- Internal temperature sensor for overheating protection.
- Shelly EM can automatically turn off the whole circuit if consumption or energy (prepaid energy option) reaches the set limit.
- Designed to fit in most standard electrical boxes and switches.
- It can be integrated to work with all other Shelly devices.
- Compatible with Android, iOS, Amazon Alexa, Google Assistant, and home automation servers using MQTT, CoAP, and REST API.
- Easily make your Arduino project live and usable in your automation project.

### Specification

| | |
|---|---|
| **POWER** | |
| Power supply AC | 110-240 V, 50/60Hz |
| Power supply DC | No |
| **SPECIAL FUNCTIONS** | |
| Contactor Control | Yes – max 2A |
| Roller shutter mode | No |
| Device temperature protection | Yes |
| Overload protection | No |
| Power measurement | Yes |
| **FEATURES** | |
| Channels | 2 Channel (Single phase) |
| Operational temperature | -20 °C to 40 °C |
| Device power consumption | < 1 W |
| Intelligent On/Off | Yes |
| Local and remote control | Yes |
| Sunrise/Sunset | Yes |
| Weekly Schedule | Yes |
| UL Listed option | No |
| **CONNECTIVITY** | |

| | |
|---|---|
| RF band: | 2401-2483 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<br>(Depends on local conditions) |
| **DIMENSIONS** | |
| Size | 39mm x 36mm x 17 mm |

## Wiring diagrams




## Use cases

### Detailed info about your electricity consumption

With Shelly EM, you can view the quality of your electricity network regarding active power, reactive power, voltage, and power factor. Monitor your facility or home to avoid additional expenses or drastic drops in energy that may damage your appliances and machines.

## Projects

### Shelly Power Consumption Alarm Signal

Always be notified and monitor your power consumption with Shelly EM, so your power counter never cuts-out your electricity.

Learn More

### Shelly EM Auto Toggle Based on Solar Panels Production

Learn how you can use Shelly EM to auto toggle based on the production of your solar panels.

Learn More

## Reviews

### The Hook Up

Which Smart Energy Monitor Is Right For You? ShellyEM vs Sense

### BeardedTinker

Home Assistant How To – Shelly EM – fuse-box Energy Meter

### digiblurDIY

ShellyEM Whole Home Power Monitoring and Notifications