



#### **MEASUREMENTS**

- √ 2x Power(W)
- √ 2x Current(A)
- √ 2x Energy(Wh)
- √ 2x Load quality
- √ 1x Voltage(V)





# **ADDITIONAL FEAUTURES**

- ✓ 365 days built-in energy history
- √ Relay output for contactor control

#### Wi-Fi Connected

Shelly EM can connect directly to any Wi-Fi network, no HUB required or can operate as an Access Point.



# **Power Supply**

Shelly EM is compatible with all major international voltage standards



## **Dual Power Metering**

Shelly EM can monitor in real time the energy consumption simultaneously in 2 circuits on the same phase. (up to 120 A each).



# **Contactor Control**

2A / 230V 50/60Hz. Shelly EM has integrated relay output made for contactor control.



# Mobile app control

Turn devices on/off directly from your smartphone or tablet. You can manage Shelly EM output from Shelly app, MQTT or Rest API.



# **Overconsumption and Over Energy Protection**

No more forgotten turned on appliances. The integrated count-down timer can automatically switch off your oven after an hour.



#### **Embedded Web Server**

Turn on/off Shelly devices directly from its interface without the need of any additional controller or hub, thanks to the embedded web.



# **Sunrise/Sunset Shedules**

Shelly EM can automatically turn on/off based on the sunrise and sunset hours.



# **Weekly Schedules**

Choose a time and create custom daily schedules for your devices.

# WI-FI-OPERATED ENERGY METER AND CONTACTOR CONTROL

With **Shelly EM** you can measure how much energy your solar system produces.

## **TECHNICAL SPECIFICATIONS**

Power supply	110-240 VAC, 50/60 Hz
Power metering	Two channels, up to 120 A each
Consumption history	365 days built-in energy history (Wh)
Maximum load	2 A / 240 VAC
Complies with EU standards:	<ul> <li>RE Directive 2014/53/EU</li> <li>LVD 2014/35/EU</li> <li>EMC 2014/30/EU</li> <li>RoHS2 2011/65/EU</li> </ul>
Working temperature	0°C ÷ 40°C
Max RF output power:	13 dBm
Wireless/Wi-Fi Protocol	802.11 b/g/n (2.4 GHz)
Frequency	2412 - 2472 MHz
Operational range (depending on local conditions)	<ul><li>up to 50 m outdoors</li><li>up to 30 m indoors</li></ul>
Dimensions (HxWxL)	39x36x17 mm
Electrical consumption:	< 1 W
Additional features	Overpower shutdown     Consumption limit
Wire cross section range	0.5 ÷ 1.5 mm²



#### **CONTROL 120A SAFE AND EASY**

Shelly EM has integrated relay output made for contactor control

- Remote control from anywhere
  You can manage ShellyEM output from
- Shelly app, MQTT or Rest API
- Overpower Control

Automatic shutdown or notification when reaching current consumption limit.

Turn off when total consumption is reached

Automatic shutdown when power is reached.

Weekly scheduling by time or sun position

Auto turn on and off by hour or sunset and sunrise.

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