

# Shelly<sup>®</sup> EM



## MEASURE AND CONTROL UP TO 2X120A

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

### MEASUREMENTS

- ✓ 2x Consumption(W)
- ✓ 2x Current(A)
- ✓ 2x Energy(Wh)
- ✓ 2x Load quality
- ✓ 1x Voltage(V)



### ADDITIONAL FEATURES

- ✓ 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 energy consumption in real time in 2 points simultaneously (up to 120A 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 Schedules

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.

### TECHNICAL SPECIFICATIONS

<b>Power supply</b>	110-230V ±10, 50/60Hz AC
<b>Power metering</b>	Two channels, up to 12A each
<b>Consumption history</b>	365 days built-in energy history (Wh)
<b>Contactor control</b>	Maximum load: 2A / 230V 50/60Hz.
<b>Complies with EU standards:</b>	<ul style="list-style-type: none"><li>• RE Directive 2014/53/EU</li><li>• LVD 2014/35/EU</li><li>• EMC 2004/108/WE</li><li>• RoHS2 2011/65/UE</li></ul>
<b>Working temperature</b>	-40°F ÷ 104°F
<b>Radio signal power:</b>	1mW
<b>Wireless/WiFi Protocol</b>	802.11 b/g/n (2.4 GHz)
<b>Frequency</b>	2400 - 2484 MHz
<b>Operational range (depending on local construction)</b>	<ul style="list-style-type: none"><li>• up to 165 feet outdoors</li><li>• up to 100 feet indoors</li></ul>
<b>Dimensions (HxWxL)</b>	1.5x1.4x0.65 in
<b>Electrical consumption:</b>	< 1 W
<b>Additional features</b>	<ul style="list-style-type: none"><li>• Overpower shutdown</li><li>• Consumption limit</li></ul>



### 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.