

# Shelly<sup>®</sup> 1

open source



USE THE POWER OF MONGOOSE OS TO MAKE YOUR OWN APPLICATION



MONGOOSE OS

MAKE YOUR ARDUINO PROJECT LIVE AND USABLE IN YOUR AUTOMATION PROJECT



ARDUINO  
OPEN-SOURCE  
COMMUNITY

SHARE YOUR EXPERIENCE WITH DEVELOPERS OVER THE WORLD



USE OUR REST API TO CONNECT SHELLY 1 OS WITH YOUR EXISTING HOME AUTOMATION SYSTEM

{ REST }



#### Mobile App Control

Turn appliances on/off directly from your smartphone or tablet.



#### Wi-Fi Connected

Simply connect Shelly to your Wi-Fi network and begin the ultimate experience by controlling your home with your phone.



#### Home assistant compatible

Control your appliance with your voice. Shelly 1 OS is Google home and Amazon Echo compatible.



#### Weekly Scheduling

Create custom daily schedules for your devices.



#### Following the Sunlight

Shelly 1 OS can automatically turn on/off based on the sunrise and sunset hours.



#### Up To 3500W

With Shelly 1 OS you can control a wide range of devices and appliances.



#### Free Cloud

All you need to manage your Shelly 1 OS is a smartphone and the Shelly Cloud free mobile application



#### Countdown timer

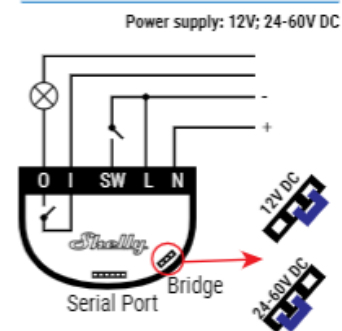
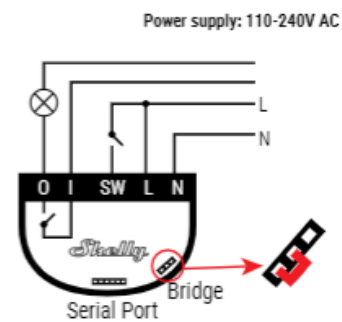
No more forgotten turned on appliances. The integrated countdown timer can automatically switch off your oven after an hour.

# THE SMALLEST, SMARTEST & THE MOST POWERFUL WI-FI SWITCH FOR YOUR AUTOMATION SOLUTION

The **Wi-Fi Relay Switch Shelly 1 OS** is intended to be mounted into a standard in-wall console, behind power sockets and light switches in order to control the electric power through it.

## TECHNICAL SPECIFICATIONS

<b>Power supply</b>	<ul style="list-style-type: none"> <li>• 110-240V ±10% 50/60Hz AC</li> <li>• 24-60V DC</li> <li>• 12V DC</li> </ul>
<b>Max load per channel</b>	16A
<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°C ÷ 40°C
<b>Radio signal power:</b>	1mW
<b>Wireless/WiFi Protocol</b>	802.11 b/g/n (2.4 GHz)
<b>Frequency:</b>	2400 – 2500 MHz
<b>Operational range (depending on local construction):</b>	<ul style="list-style-type: none"> <li>• up to 50 m outdoors</li> <li>• up to 30 m indoors</li> </ul>
<b>Dimensions (HxWxL):</b>	41 x 36 x 17 mm
<b>Electrical consumption:</b>	< 1 W



**LEGEND:**  
 N - Neutral input (Zero)/(+)  
 L - Line input (110-230V)/(-)  
 O - Output  
 I - Input  
 SW - Switch (input) controlling O

The WiFi Relay Switch Shelly 1 may control an electrical circuit up to 3.5 kW. It is intended to be mounted into a standard in-wall console, behind power sockets and light switches or other places with limited space. Shelly may work as a standalone Device or as an accessory to a home automation controller.

# Shelly 1PM



## WHERE DOES MY MONEY GO?



- HEATING**
- COOLING**
- WATER HEATING**
- APPLIANCES**  
Includes refrigerator, dishwasher, clothes, washer and dryer
- LIGHTS**
- ELECTRONICS**  
Includes telephone and external power, adapters, consumer electronics (computer, TVs and DVD player), home and office equipment and small appliances



### Power Metering

Shelly 1PM has an integrated precise power meter. You can measure the overall consumption of all the electric devices you are controlling.



### Mobile App Control

Turn appliances on/off directly from your smartphone or tablet.



### Wi-Fi Connected

Simply connect Shelly to your Wi-Fi network and begin the ultimate experience by controlling your home with your phone.



### Home assistant compatible

Control your appliance with your voice. Shelly 1PM is Google home and Amazon Echo compatible.



### Weekly Scheduling

Create custom daily schedules for your devices.



### Following the Sunlight

Shelly 1PM can automatically turn on/off based on the sunrise and sunset hours.



### Up To 3500W

With Shelly 1PM you can control a wide range of devices and appliances.



### Free Cloud

All you need to manage your Shelly 1PM is a smartphone and the Shelly Cloud free mobile application



### Countdown timer

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

# CONTROL ANY ELECTRICAL APPLIANCE AND MEASURE ITS CONSUMPTION

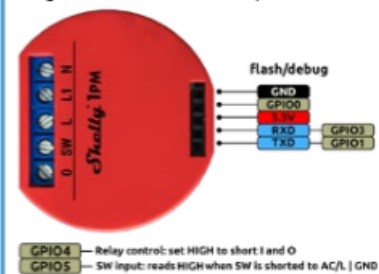
The **Wi-Fi Relay Switch Shelly 1PM** is intended to be mounted into a standard in-wall console, behind power sockets and light switches in order to control the electric power through it.

## TECHNICAL SPECIFICATIONS

<b>Power supply</b>	<ul style="list-style-type: none"><li>• 110-240V ±10% 50/60Hz AC</li><li>• 24-60V DC</li></ul>
<b>Max load per channel</b>	16A
<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°C ÷ 40°C
<b>Radio signal power:</b>	1mW
<b>Wireless/WiFi Protocol</b>	802.11 b/g/n (2.4 GHz)
<b>Frequency:</b>	2400 – 2500 MHz
<b>Operational range (depending on local construction):</b>	<ul style="list-style-type: none"><li>• up to 50 m outdoors</li><li>• up to 30 m indoors</li></ul>
<b>Dimensions (HxWxL):</b>	41 x 36 x 17 mm
<b>Electrical consumption:</b>	< 1 W

## For developers

Shelly 1PM comes with a programming/ debug header which can be used to flash alternative firmware on the device. It has an ESP8266 inside, with a 2MB flash chip. A USB-to-UART adapter is needed as well as a reliable 3.3V with at least 350 mA drive capability. The following diagram shows the device pinout:



# Shelly<sup>®</sup> 2.5



## SHELLY 2,5 CONNECTING EVERYTHING



SHELLY 2,5 IS 39x36x17 mm



## MANAGE YOUR COOLING AND HEATING SYSTEM REMOTELY



### Wi-Fi Connected

Shelly 2,5 can connect to any Wi-Fi network or can operate as an Access Point.



### 2 Channels

Maximum load current per output: 10A/230V, 50/60Hz. You can control a wide range of home appliances and office equipment.



### Power Metering

Shelly 2,5 has an integrated precise power meter. You can measure the overall consumption of all the electric devices you are controlling.



### Energy Efficient

Manage and control heating radiators and air conditioners, in order to reduce energy consumption related to heating/cooling with up to 30%.



### Mobile app control

You can turn on and off your appliances from anywhere in the world.



### Countdown timer

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

## EASY INSTALLATION



### SMALL

Shelly 2,5 is 39x36x17mm. You can install Shelly 2,5 into the wall under the power socket or a standard light switch. For roller-shutters, barriers, etc., 3-wire installation is required.



### EASY WIRING

And retrofit! Install the Shelly 2,5 relays to your existing electric circuits, for 3 minutes each, and make your home smart and energy efficient.



### PRACTICAL

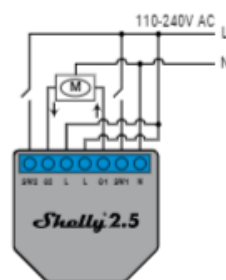
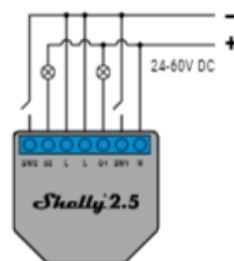
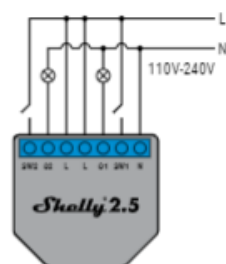
Shelly 2,5 can be installed on a DIN into your electricity box, right next to the breakers.

# COMPLETELY RE-ENGINEERED 100% PROTECTED

**Shelly 2,5 Wi-Fi dual relay switch** with dual power metering is 20% more powerful, 30% smaller and with 50% range increased than his predecessor.

## TECHNICAL SPECIFICATIONS

<b>Power supply</b>	Shelly 2,5 is compatible with all major international voltage standards 110-230V $\pm$ 10% 50/60Hz AC
<b>2 Channels</b>	Maximum load current per output: 10A/230V, 50/60Hz. You can control a wide range of home appliances and office equipment.
<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°C $\pm$ 40°C
<b>Radio signal power:</b>	1mW
<b>Wireless/WiFi Protocol</b>	WiFi 802.11 b/g/n Shelly 2,5 can connect to any Wi-Fi network or can operate as an Access Point
<b>Frequency:</b>	2400 – 2500 MHz
<b>Operational range (depending on local construction)</b>	<ul style="list-style-type: none"> <li>• up to 50 m outdoors</li> <li>• up to 30 m indoors</li> </ul>
<b>Dimensions (HxWxL):</b>	39 x 36 x 17 mm
<b>Electrical consumption</b>	< 1 W



### LEGEND:

**N** - Neutral input (110-230V AC); **+** Positive input (24-60V DC)  
**L** - Line input (110-230V AC); **-** Negative input (24-60V DC)  
**O1** - Output 1;  
**O2** - Output 2;  
**SW1** - Switch 1 (input controlling O1);  
**SW2** - Switch 2 (input controlling O2)