

GET STARTED WITH OHMIGO Ohm On WiFi

STANDARD FIRMWARE

OHMIGO@ohmonwifi is a precision digitally controllable resistor that allows to digitally control and cloud connect any existing analog equipment, using a two-wire thermistor or some other RTD for temperature sensing.

The connection is made via Wifi and the integrated web server. The device can generate a resistance ranging from 68.5 ohms up to 9,000,000 ohms with superior accuracy, better than 1%.



During the first few seconds of operation, an LED indicates that you have connected Rout and GND with the correct polarity - If LED=RED, then switch your connection for best accuracy. A blue LED indicates that the device has power and from devices shipped in 2024 there is also a green LED that flashes when the device is connected to WI-Fi.

Get Started

- 1.** Connect an USB micro charging cable to Ohmigo.ohmonwifi and connect your phone to the device's WiFi network. The network name looks like this: "Ohmigo.OhmOnWiFi". When the phone is connected to the network, the configuration page will open automatically. If not, open a web browser and type "http://192.168.4.1"
- 2.** Click on "Settings" and then select your home network from the list. You then need to enter the WiFi password, so please have this ready. Then proceed with the settings you want to set. Mandatory settings are marked with *.
- 3.** When you have configured the settings you want to, click "Save" at the bottom. Then wait while the settings are sent to Ohmigo.ohmonwifi. When everything is done, the device's own Wi-Fi network disappears and it connects to your home network.
- 4.** This is how to use the user interface. After connecting something to the terminal of the device (Rout/GND), you can open the browser and type <http://ohmonwifi.local> to access the user interface. Here you can easily regulate which temperature the device should simulate using the plus and minus buttons. Conversion is based on the default conversion table Temperature – Resistance. On delivery Ohmigo.ohmonwifi is set for TYPE=31 which is 4700 ohms at 25°C and a common sensor for many heating boilers.
- 5.** Via the device's API it is possible to read and write settings and to add your own conversion table (temperature to resistance).

turn page 

Function-Button

On the front there is a small hole - use a paper clip or similar to press the button:

- One short press checks the connection Rout/GND - LED=GREEN or LED=RED
- Press > 5s Ohmigo.ohmonwifi restarts to change the settings, connect to the device's WiFi-network.
- Press >10s Ohmigo.ohmonwifi resets to factory settings.

Technical Data

Power Supply:

5 VDC via micro-USB

Power Consumption:

< 100 mA

Output resistance:

68.5 ohm ... 9 000 000 ohm, Error < 1%

WiFi:

2.4 GHz

Size:

L60 x W28 x H20 mm

Server URLs:

mDNS - <http://ohmonwifi.local>*

Syntax - <http://ohmonwifi.local/syntax>*

*If you have renamed the device, use the new name instead of the default name "ohmonwifi". You can always reach the device directly via its IP address. – 192.168....
If you use multiple devices on the same network, they will need a unique name. Eg. "Ohm1", "Ohm2" etc.
Don't use any special characters (eg. &!?) or Å,Ä,Ö etc.

Terminal

Rout

Ohm output +

GND

Combined earth for ohm output and analog input

Config

Jumper to GND if you want to use analog input
Ain controls Rout instead of Web API

Ain

Analog input 0-10V corresponds -30..+70°C or
-50..+50°C as default TYPE

Scan for...



More info