

Qoltec®



USER MANUAL

63A ENERGY METER for DIN rail with Wi-Fi TUYA & Smart Life

Model: 50981

Introduction

Thank you for your trust and for choosing our product. We are confident that the product will meet your expectations. This manual contains instructions on the installation and use of the product, including important safety instructions regarding correct operation and installation. If you have any questions after reading this manual, please contact our Customer Service Department.

About the product

A modern Wi-Fi-enabled DIN-rail energy meter for remote monitoring of electricity consumption in the home or office. It allows you to read voltage, current, power and energy in real time via the Tuya or Smart Life app. Ideal for system monitoring, automation and protection – e.g. cutting off the power supply when the power limit is exceeded. The device is designed for mounting on a standard 35 mm DIN rail in an electrical distribution board. Power is supplied from the top, in line with typical installation arrangements.

Button description

Figure 1 in the appendix

N: Null wire – N: neutral wire

L: Live wire – L: live wire

Network configuration light – network configuration indicator

Fault light – fault indicator

Voltage – voltage

Electricity consumption – electricity consumption

Current – current

Leakage value – leakage current value

Setting button – setting button

ON/OFF button – ON/OFF button

Selection key – selection key

Selection/Network configuration – selection/network configuration

Safety information

1. Disconnect the power supply before carrying out any installation work.
2. Installation must only be carried out by a qualified electrician.
3. Ensure that the voltage and current in the circuit comply with the device's permissible parameters.
4. Connect the wires to the appropriate terminals
5. Do not use the device in environments with high humidity, high dust levels or in direct sunlight.
6. The operating temperature range is usually between -20°C and +60°C (check the manufacturer's documentation).
7. Do not exceed the permissible current load.
8. Do not open the device's casing – there is a risk of electric shock.
9. Do not attempt to repair the device yourself – it contains no user-serviceable parts.
10. Always use residual current devices (RCDs) and overcurrent protection (fuses) in the installation.
11. Check the condition of the cables and connections regularly.
12. In the event of erratic operation, disconnect the device and consult the service department.

Real-time monitoring

The switch can monitor the current, voltage and power of the connected device in real time. It can also record electricity consumption on an annual, monthly, daily and hourly basis, as well as over various time periods, helping the user to better control the energy consumption of connected devices. It allows you to set the switch's status for different scenarios and remotely monitor the current operating status of electrical devices.

Network and Wi-Fi configuration

Note: Ensure that the main power supply to your home is switched off before installation!

Step 1:

Connect the wires to the top of the smart switch.

Connect the live wire to the L terminal and the neutral wire to the N terminal.

Make sure the wiring is correct and that the Wi-Fi signal is strong enough.

Step 2:

Turn on Bluetooth and Wi-Fi on your phone, then log in to the mobile app.

Figure 2 in the appendix

Press and hold the third button (symbol: E) for about 5–10 seconds until the LED starts flashing rapidly – this indicates that the device is in pairing mode.

Next, go to the device pairing screen in the app and wait for the switch to be detected.

Step 3:

Whilst waiting in the app interface, the device should be detected automatically and appear as a pop-up window.

Alternatively, you can click the ‘+’ icon in the top right-hand corner, then select ‘Add’, wait for the device to be detected, and then click ‘Add’ again to add it to the app.

Figure 3 in the appendix

Step 4:

Enter the Wi-Fi network name (SSID) and password, click ‘Next’, and then wait for the automatic switch to connect to the network.

Figure 4 in the appendix

Step 5:

Once the connection is successful, go to the control page in the app.

The indicator LED will change from a slow blue flash to a steady blue light, indicating that the device is ready for use.

Connection method

Figure 5 in the appendix

Wire markings:

L (brown) – live wire (mains supply),

N (blue) – neutral wire,

P (green-yellow) – protective earth (PE) conductor.

Phase (L) to the L input,

Neutral (N) to the N input,

Load to outputs L and N.

Device functions

- Supports single-phase devices: up to 13,000 W (resistive: heaters, boilers), up to 6,000 W (inductive: motors, pumps)
- Free Tuya / Smart Life app (Android, iOS)
- Remote control via Wi-Fi – switch on/off from anywhere
- Real-time measurement: voltage, current, power, energy consumption (kWh)
- Energy consumption history – daily, monthly and annual graphs
- Automation: schedules, timers, sunrise/sunset mode
- Power cut-off when threshold is exceeded (automatic control)
- Relay status memory following a power cut
- Maintenance mode and setting lock
- Up to 10 groups of current limits can be set for different time periods (e.g. from 10:55 to 12:55, max 5A). Once the limit is exceeded, the power is cut off. Automatic re-engagement can be set, or the power can be switched on manually.

Figure 6 in the appendix

- Automatic reclosing after a fault (recloser function). Setting the value to 0 disables the reclosing function. Default: 3 attempts. On the 4th overload, the unit is switched off.

Screen settings function

To set protection values and additional functions:

1. Press and hold the 'SET' button until the voltage value starts flashing. You can then use the up/down buttons to set:

- overvoltage threshold
- undervoltage threshold
- current protection threshold

- delay time
- automatic reclosing time
- screen time

2. After setting each value, confirm it by briefly pressing the 'SET' button.

Technical specifications

Protocol: Wi-Fi (default)

Rated operating voltage range: 220–240 V

Control type: Remote (app) / manual

Pole configuration: 2P + N (neutral pole as a through conductor, uninterrupted)

Maximum load: 13,000 W / electric motor $\leq$ 6,000 W

Rated current: max. 63 A

Current range: 1–63 A

Operating temperature: -40°C to +100°C

Product dimensions: 36 × 50 × 82 mm

Maintenance

1. Keep clean using a soft, dry cloth to remove dust and dirt. Do not use chemicals.
2. Regularly check the power cables and connectors for damage, such as chafing, cracks or loose connections.

Disposal

This product is subject to the regulations on the disposal of electrical and electronic equipment (WEEE). Please take it to an e-waste collection point that ensures safe recycling in accordance with GPSR standards. Check where your nearest e-waste collection points are located. If you have any questions regarding disposal, please contact the manufacturer or an authorised service centre.

Warranty and servicing information

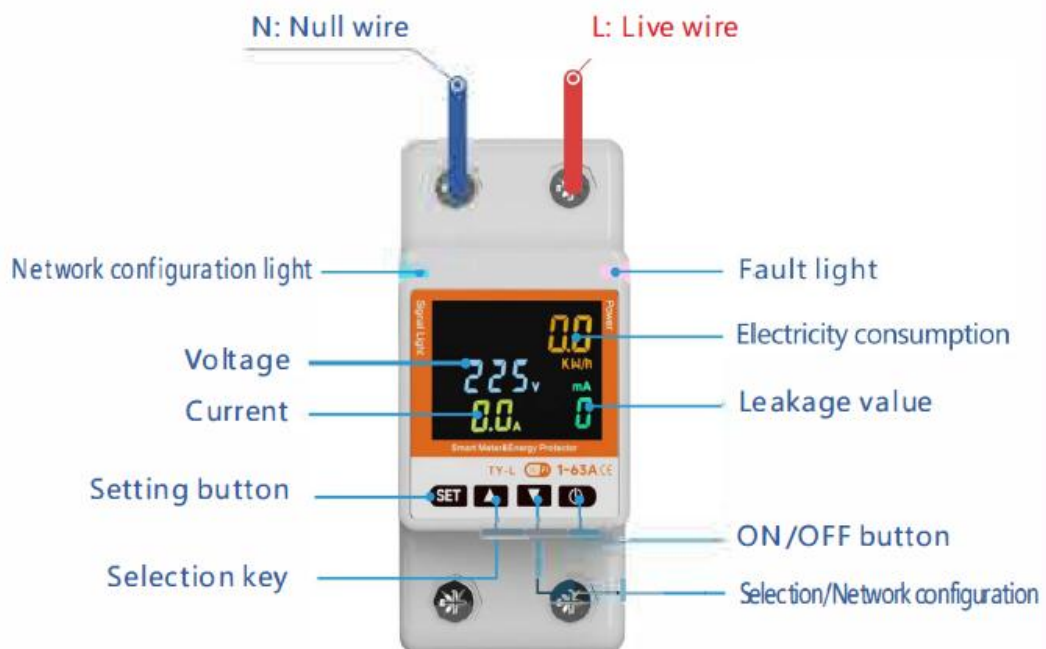
This product is covered by a 24-month manufacturer's warranty, effective from the date of purchase. The warranty covers all material and manufacturing

defects. Please contact our after-sales service if you experience any problems with the device to ensure prompt and professional assistance. The warranty does not cover damage resulting from misuse, drops, mechanical damage, unauthorised repairs or attempts to dismantle the device.

Attachment

1

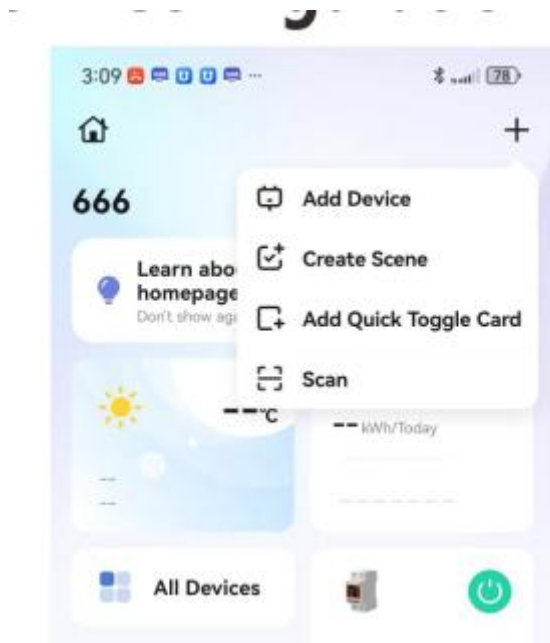
Schematic Diagram



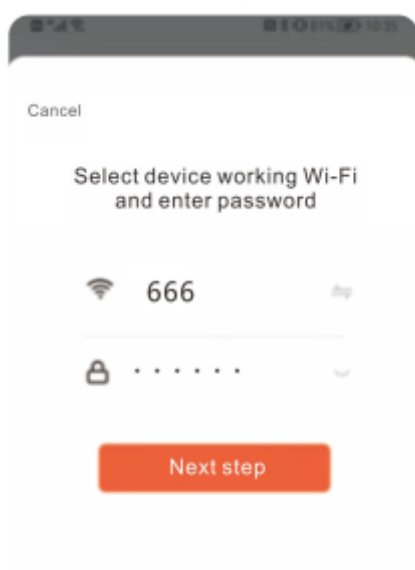
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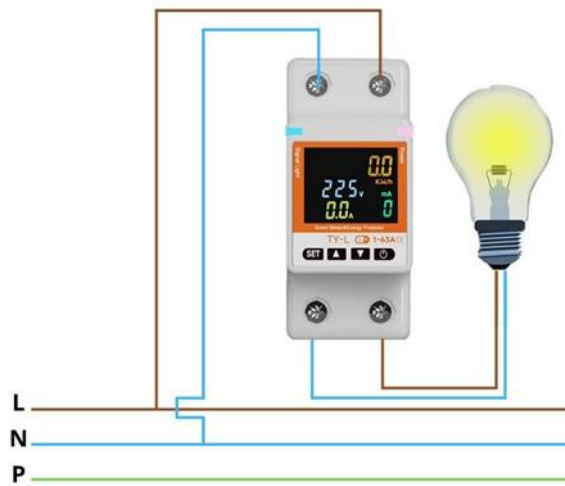
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4



5



6

