

TONGOU With Power Monitoring 16A

Tongou Smart WiFi DIN Rail Switch (16A) with Energy Monitoring User Manual

Model: With Power Monitoring 16A

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the Tongou Smart WiFi DIN Rail Switch (Model: With Power Monitoring 16A). This device allows you to convert conventional small appliances into smart, remotely controllable objects via the Tuya or Smart Life application, and offers comprehensive energy consumption monitoring.

2. SAFETY INFORMATION

WARNING: Electrical installation should only be performed by a qualified electrician. Ensure power is disconnected before installation to prevent electric shock.

- Operating voltage: AC 90-240V, 50/60Hz. Ensure your electrical system matches these specifications.
- The device is designed for 1-way circuits and a maximum current rating of 16 Amps. Do not exceed this rating.
- This switch is not a circuit breaker. It does not provide short-circuit or overload protection. Install it after a differential switch for proper protection.
- The product is made from flame-retardant PA66 material with good conductivity copper contacts (Silver Relay Contacts) for enhanced safety and high-temperature resistance.
- International Protection Rating: IP20. This device is not waterproof and should not be exposed to moisture.

3. PRODUCT OVERVIEW

The Tongou Smart WiFi DIN Rail Switch is a compact device designed for integration into your electrical panel. It enables smart control and energy monitoring for connected appliances.

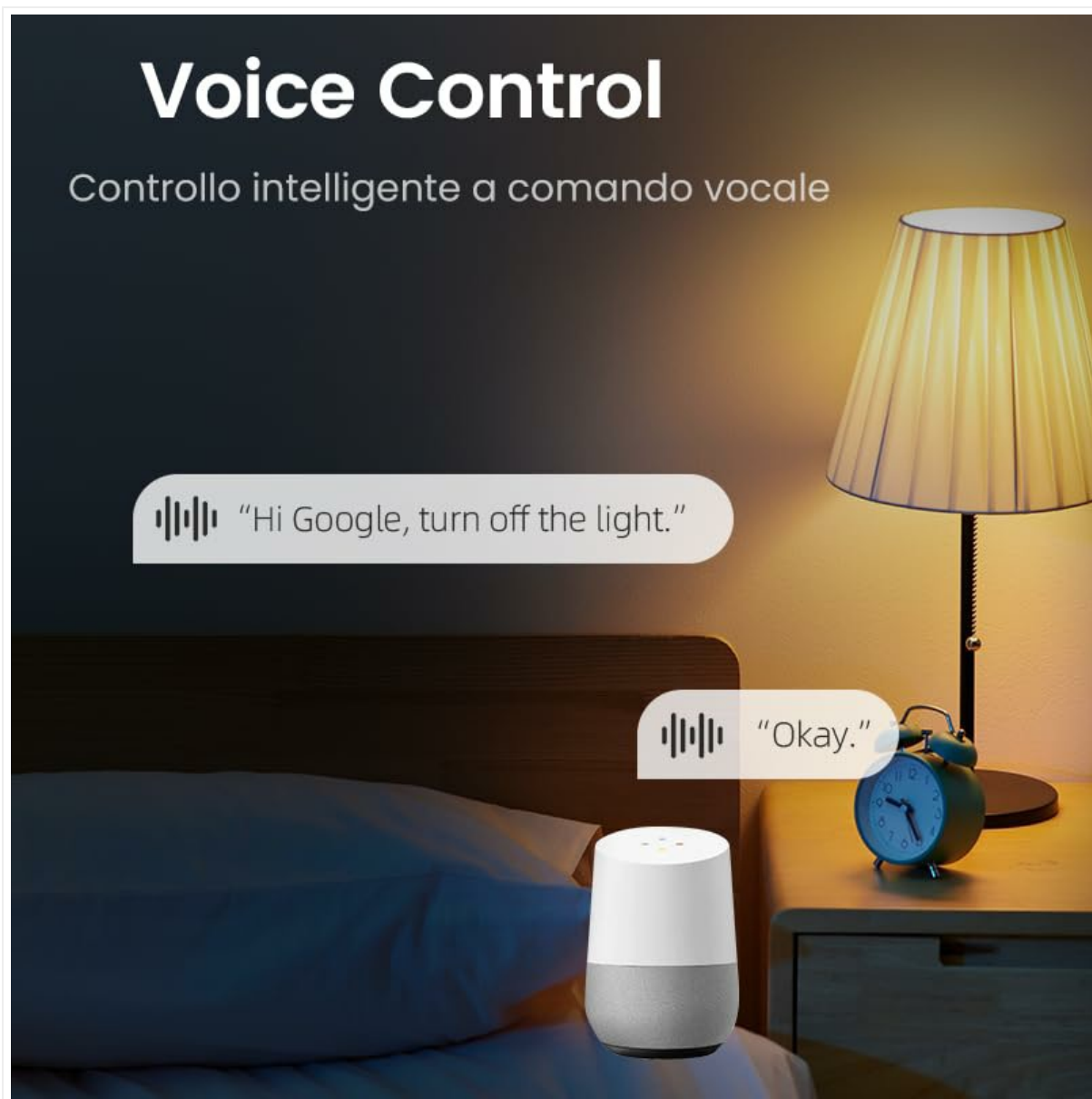


Figure 3.1: Front view of the Tongou Smart WiFi DIN Rail Switch.

Key Features:

- **Remote Control:** Control appliances via the Tuya or Smart Life app from anywhere.
- **Energy Monitoring:** Real-time display and historical recording of current, voltage, power, and total energy consumption.
- **Voice Control:** Compatible with Amazon Alexa and Google Assistant for hands-free operation.
- **Multiple Timer Modes:** Includes timer, countdown, cycle timing, and astronomical timing functions.
- **Easy Installation:** Designed for quick wiring and DIN rail mounting.

4. SPECIFICATIONS

Parameter	Value
Model Number	With Power Monitoring 16A
Operating Voltage	AC 90-240V, 50/60Hz
Current Rating	16 Amps

Parameter	Value
Wattage	3840 Watts (Max)
Operation Mode	ON-OFF
Connectivity Protocol	Wi-Fi (2.4 GHz)
Control Method	App (Tuya/Smart Life), Voice (Alexa/Google Assistant)
Dimensions (L x W x H)	9 x 2 x 8 cm
Item Weight	110 g
Terminal Type	Screw
Circuit Type	1-way
International Protection Rating	IP20
Upper Temperature Rating	80 Degrees Celsius
Contact Material	Silver Relay Contacts
Colour	Grey

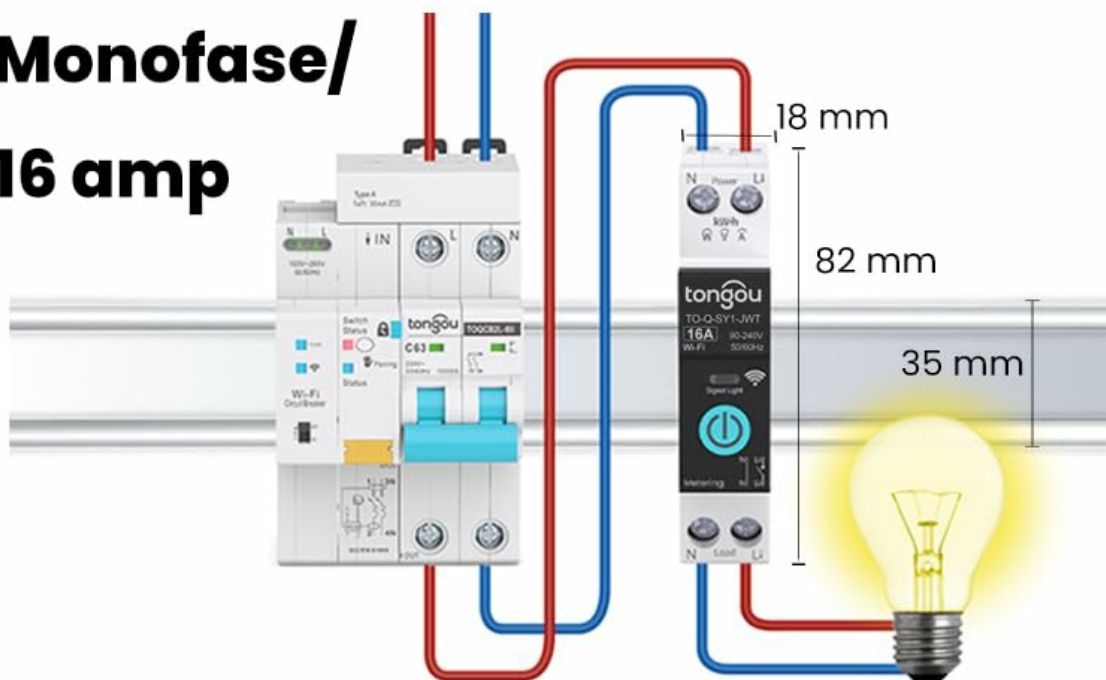
5. SETUP

5.1. Installation

The Tongou Smart WiFi Switch is designed for DIN rail mounting. Follow these steps for safe installation:

- Disconnect Power:** Before starting any electrical work, ensure the main power supply to the circuit is turned off at the circuit breaker. Verify with a voltage tester.
- Mount the Switch:** Clip the smart switch onto a standard DIN rail within your electrical panel.
- Wiring:** Connect the live (L) and neutral (N) wires to the designated terminals on the switch. The switch is a 1P (single pole) device, meaning it switches only the phase (live) wire. It requires a permanent neutral connection. This device should be installed after a differential switch for proper protection against short circuits, overloads, and leakage. Use a screwdriver to easily tighten and loosen the screw terminals.

Monofase/ 16 amp



- 1 Relè WiFi / 1P+N/ Taglia solo la fase, a neutro permanente. Non sostituisce un interruttore con protezione da cortocircuito
- 2 Installare dopo l'interruttore differenziale. Protezione: cortocircuito, sovraccarico e fughe
- 3 Ideale per carichi AC1: scaldabagni, lampade ad incandescenza, riscaldatori

Figure 5.1: Wiring diagram for the Tongou Smart WiFi DIN Rail Switch. Connect the phase (L) and neutral (N) wires as indicated. This switch is for single-phase systems and handles up to 16 Amps. It should be installed after a differential switch for safety.

Note: This switch is ideal for AC loads such as water heaters, incandescent lamps, and heaters.

5.2. App Pairing

To control the switch remotely, you need to pair it with the Tuya Smart or Smart Life app.

1. **Download the App:** Download the "Smart Life" or "Tuya Smart" app from the App Store (iOS) or Google Play Store (Android).
2. **Register/Log In:** Open the app and register for a new account or log in if you already have one.
3. **Add Device:** Ensure your smartphone is connected to a 2.4 GHz Wi-Fi network. Power on the smart switch. The Wi-Fi indicator on the switch should be blinking rapidly (refer to the switch's LED indicator guide for pairing mode). In the app, tap "+" or "Add Device" and select the appropriate device type (e.g., "Switch (Wi-Fi)").
4. **Confirm Pairing Mode:** Confirm the indicator light is blinking rapidly in the app.
5. **Enter Wi-Fi Details:** Enter your 2.4 GHz Wi-Fi network password.
6. **Connect:** The app will begin connecting to the device. Once connected, you can rename the switch and assign it to a room.

DIN Interruttore Smart wifi



Figure 5.2: Overview of the smart switch features, including control via Tuya/Smart Life app, voice control, energy monitoring, and timer functions.

6. OPERATING INSTRUCTIONS

6.1. Manual Control

The switch features a physical button on its front panel. Press this button once to manually turn the connected appliance ON or OFF.

6.2. App Control

After successful pairing, open the Tuya Smart or Smart Life app. Select your switch from the device list. You can then:

- Toggle the switch ON/OFF remotely.
- Access energy consumption data.
- Set up schedules and timers.
- Configure automation rules.

6.3. Voice Control

The switch is compatible with Amazon Alexa and Google Assistant. To enable voice control:

1. Link your Tuya Smart or Smart Life account to your Amazon Alexa or Google Home app.
2. Discover devices in your voice assistant app.
3. Use voice commands such as: "Alexa, turn on [Device Name]" or "Hey Google, turn off [Device Name]".



Figure 6.1: Example of using voice commands with a smart assistant to control the switch.

6.4. Timer Functions

The app provides various timer modes to automate your appliances:

- **Schedule Timer:** Set specific ON/OFF times for different days of the week.
- **Countdown Timer:** Set a duration after which the switch will turn ON or OFF.
- **Cycle Timing:** Configure repetitive ON/OFF cycles.
- **Astronomical Timing:** Automate based on sunrise and sunset times in your location.

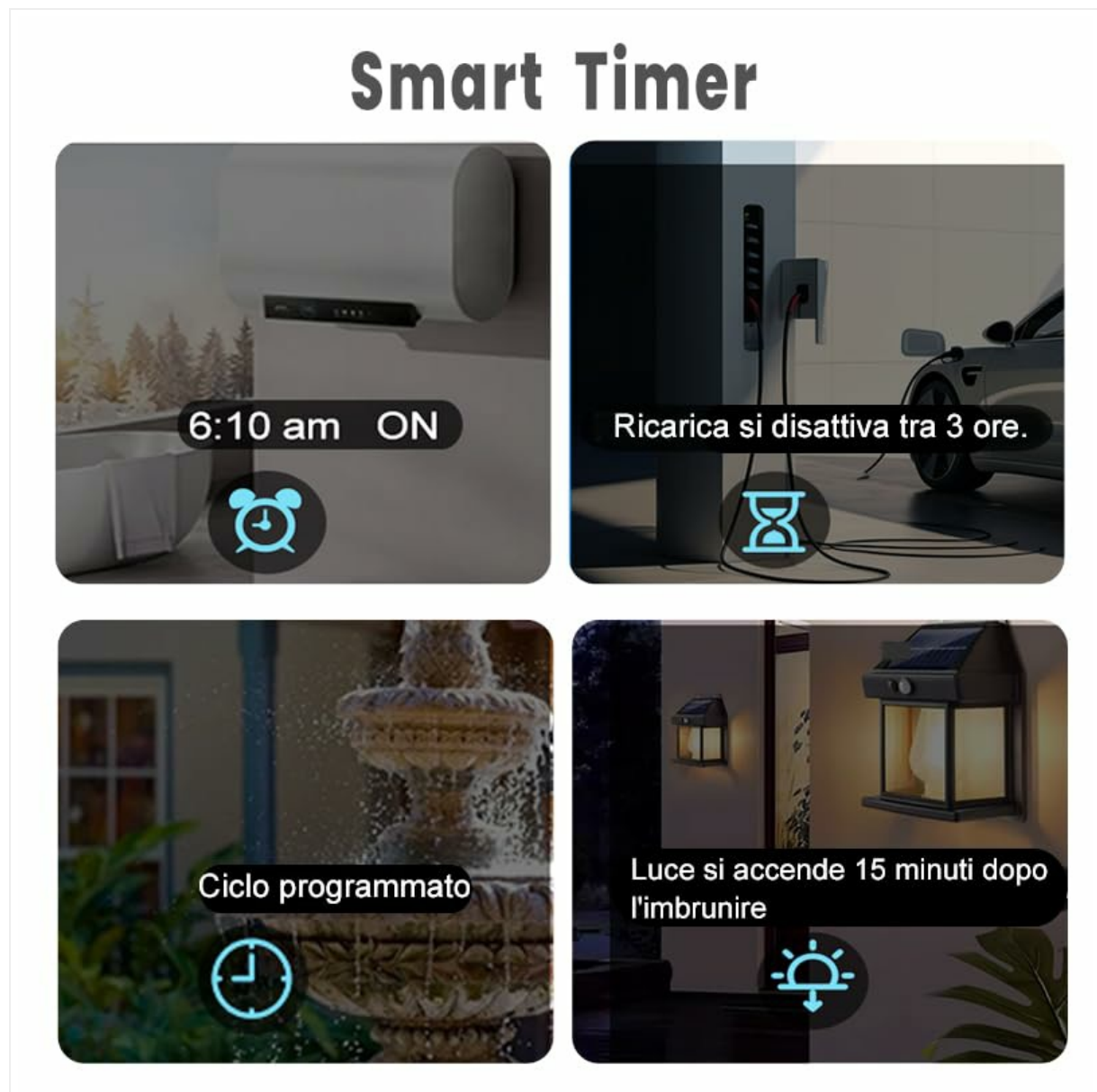


Figure 6.2: Visual representation of various smart timer functions available in the app.

6.5. Energy Monitoring

The switch provides real-time and historical energy consumption data. Access this feature within the app to:

- View real-time load current, voltage, and power.
- Review historical power consumption records by hour, day, month, and year.
- Analyze energy usage patterns to optimize consumption.



Figure 6.3: Example of the energy consumption log interface, displaying total electricity consumption over various time periods.

Visualisieren Sie Strom, Spannung und Leistung der Last in Echtzeit und zeichnen Sie den Stromverbrauch für verschiedene Zeiträume (Stunden, Tage, Monate und Jahre) auf

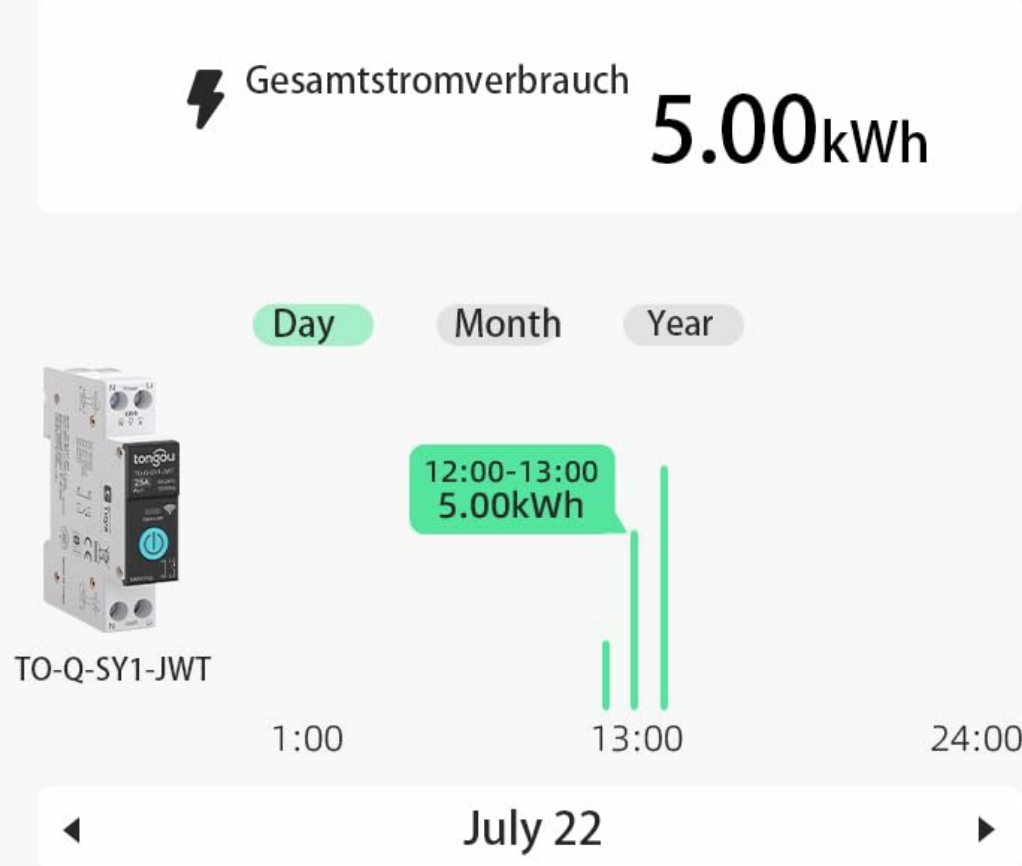


Figure 6.4: Real-time visualization of current, voltage, and power load, with historical consumption records.

7. MAINTENANCE

The Tongou Smart WiFi Switch requires minimal maintenance. Follow these guidelines:

- **Cleaning:** Ensure the device is powered off before cleaning. Use a dry, soft cloth to wipe the exterior. Do not use liquid cleaners or solvents.
- **Firmware Updates:** Periodically check the Tuya Smart or Smart Life app for available firmware updates for your device. Updates can improve performance and add new features.
- **Environmental Conditions:** Operate the device within its specified temperature range (up to 80°C) and avoid humid environments.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device not connecting to Wi-Fi.	Incorrect Wi-Fi password, 5GHz Wi-Fi network, device too far from router, Wi-Fi signal interference.	<p>Ensure your Wi-Fi network is 2.4 GHz.</p> <p>Verify the Wi-Fi password.</p> <p>Move the device closer to the Wi-Fi router or use a Wi-Fi extender.</p> <p>Restart your router and the smart switch.</p> <p>Ensure the switch is in pairing mode (blinking indicator).</p>
App control is unresponsive.	No internet connection on phone or switch, app glitch.	<p>Check your phone's internet connection.</p> <p>Verify the switch's Wi-Fi indicator is solid (connected).</p> <p>Close and reopen the app.</p> <p>Restart the smart switch.</p>
Voice control not working.	Account not linked, device not discovered, incorrect commands.	<p>Ensure your Tuya/Smart Life account is correctly linked to Alexa/Google Assistant.</p> <p>Redo device discovery in your voice assistant app.</p> <p>Use the exact device name configured in the app.</p>
Energy monitoring data is inaccurate or missing.	Improper wiring, device malfunction.	<p>Verify wiring connections are secure and correct.</p> <p>Ensure the connected appliance is drawing power.</p> <p>If the issue persists, contact customer support.</p> <p>If the issue persists, contact customer support.</p>

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support or further assistance, please contact HIVAGI INTERNATIONAL, the importer and packer of this product.

- **Importer/Packer:** HIVAGI INTERNATIONAL
- **Website:** www.hivagi.in
- **Customer Care:** +91 90232 97428