

RTX DTS1419

RTX DTS1419 Three-Phase DIN Rail Energy Meter (WiFi) User Manual

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your RTX DTS1419 Three-Phase DIN Rail Energy Meter with WiFi connectivity. Please read this manual thoroughly before installation and use to ensure proper function and safety.

PRODUCT FEATURES

The RTX DTS1419 is an intelligent three-phase energy meter designed for DIN rail mounting. It offers advanced energy monitoring and control capabilities through WiFi connectivity and the Tuya Smart Life application.

Key features include:

- Real-time monitoring of voltage (V), current (A), and power (kW) for each phase.
- Remote control for switching power on or off.
- Clear LCD display for sequential data viewing.
- Integrated status indicator lights.
- Prepayment function with notifications for exceeding set energy limits.
- Detailed energy consumption statistics for each phase.
- Easy installation on a standard DIN rail.
- Maximum current capacity of 80A.
- Continuous current rating of 10A per phase.
- Voice control compatibility with Google Home and Amazon Alexa.
- 2.4 GHz WiFi communication for direct router connection (no gateway required).
- Automated scenarios based on predefined measurement values (e.g., automatic shutdown if voltage exceeds limit).
- Archiving function for historical energy data.

SAFETY INFORMATION

Safety Precautions

WARNING: Installation and maintenance should only be performed by qualified electricians. Disconnect power before installation or servicing to prevent electric shock.

- Ensure all local electrical codes and regulations are followed during installation.
- Do not operate the device if it appears damaged.
- Keep the device away from water and high humidity.
- Do not exceed the maximum current rating of 80A.
- Ensure proper grounding.

SETUP

1. Installation

The RTX DTS1419 is designed for DIN rail mounting within an electrical panel.

1. **Mounting:** Securely attach the energy meter to a standard 35mm DIN rail. Ensure the clip at the bottom locks into place.
2. **Wiring:** Refer to the wiring diagram below for correct connection of the three phases (L1, L2, L3) and neutral (N). Ensure all connections are tight and secure.



Image Description: A detailed wiring diagram showing the connection points for the three phases (L1, L2, L3) and neutral (N) on the RTX DTS1419 energy meter. Input terminals are on the left, output terminals on the right. Each phase is clearly labeled with corresponding wire colors (brown, black, grey for phases, blue for neutral) and arrows indicating current flow.

3. **Power On:** After verifying all connections, restore power to the circuit. The LCD display on the meter should illuminate.

2. App Connection (Tuya Smart Life)

1. **Download App:** Download the "Tuya Smart Life" app from your smartphone's app store (iOS or Android).
2. **Register/Login:** Open the app and register a new account or log in to an existing one.
3. **Add Device:** In the app, tap the "+" icon to add a new device. Select "Electrical" > "Energy Meter (Wi-Fi)".
4. **Pairing Mode:** On the RTX DTS1419 meter, press and hold the "SET" button until the network indicator light (blue LED) starts blinking rapidly. This indicates pairing mode.
5. **Connect to Wi-Fi:** Follow the on-screen instructions in the app to connect the device to your 2.4 GHz Wi-Fi network. Ensure your phone is also connected to the same 2.4 GHz network.
6. **Device Added:** Once successfully paired, the network indicator light will become solid, and the device will appear in your Tuya Smart Life app.

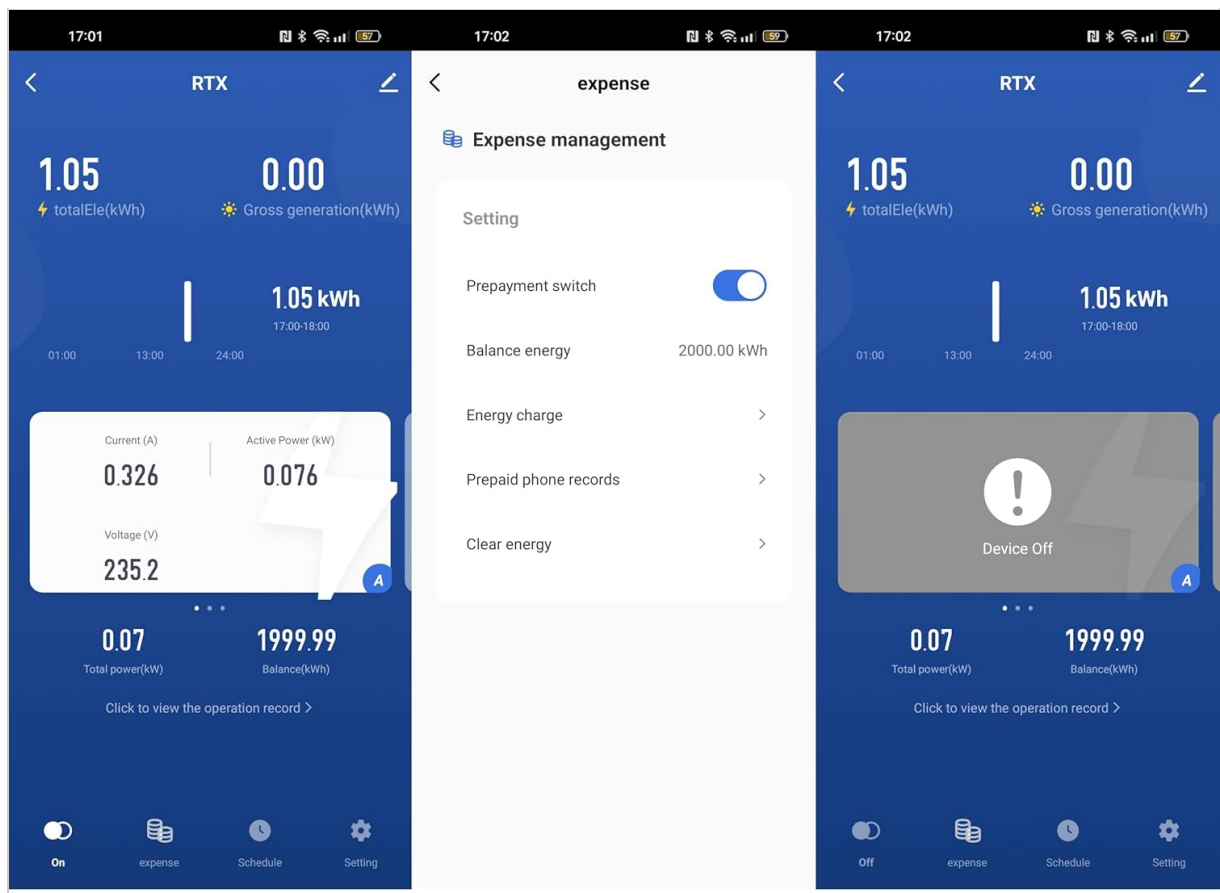


Image Description: The RTX DTS1419 energy meter displayed next to a smartphone showing the Tuya Smart Life application interface. The app displays real-time energy data such as current, active power, and voltage, indicating successful connection and monitoring.

OPERATING INSTRUCTIONS

1. Real-time Monitoring

Once connected to the Tuya Smart Life app, you can monitor various electrical parameters:

- **Current Electrical Consumption (I):** View the current draw in Amperes (A).

- **Current Power Consumption (P):** View the active power in Kilowatts (kW).
- **Current Supply Voltage (V):** View the voltage for each phase.
- **Current Energy Consumption (kW.h):** Track accumulated energy usage in kilowatt-hours.

The meter's LCD display also cycles through these values directly on the device.

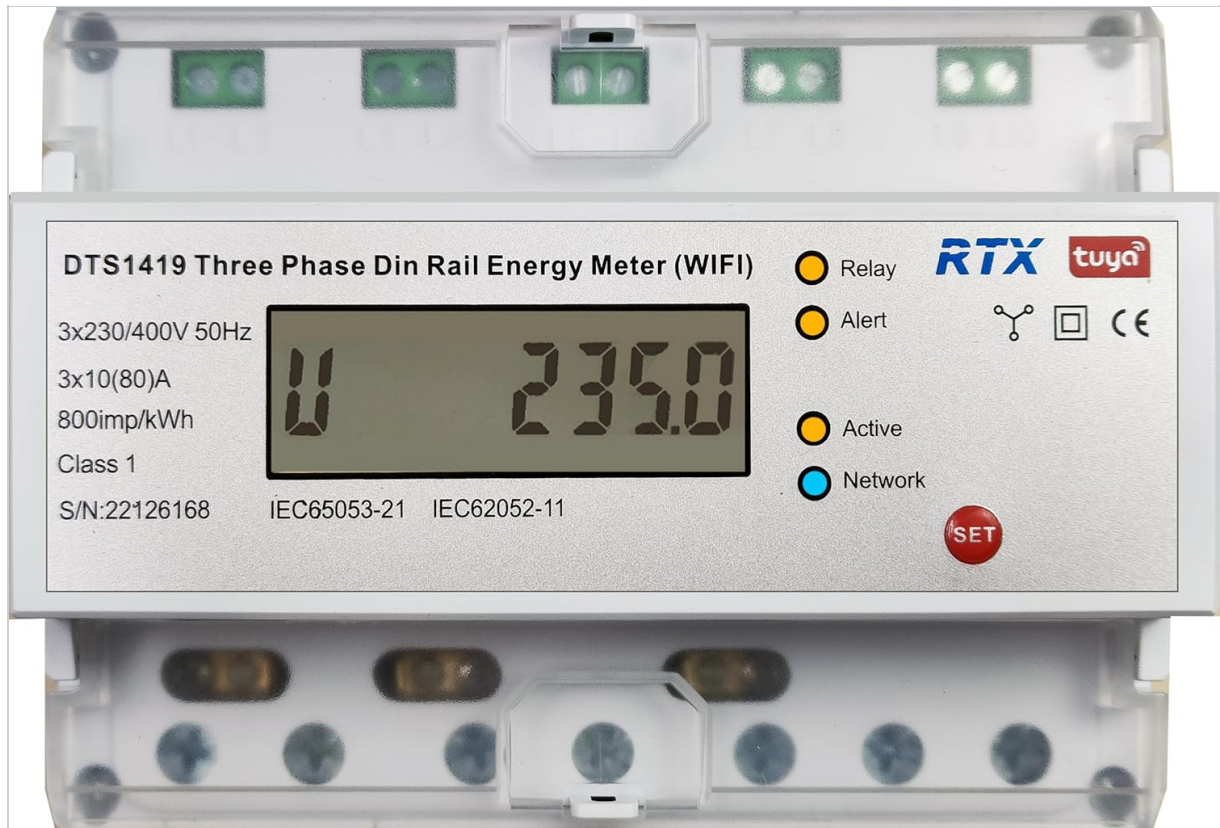


Image Description: A close-up front view of the RTX DTS1419 Three-Phase DIN Rail Energy Meter. The LCD screen clearly displays "U 235.0", indicating a voltage reading of 235.0 Volts. Status indicator lights for Relay, Alert, Active, and Network are visible on the right side, along with the RTX and Tuya logos.

2. Remote Control

The Tuya Smart Life app allows you to remotely switch the power on or off for the connected circuit. This function activates the integrated relay within the meter.

- Open the device interface in the Tuya Smart Life app.
- Locate the "On/Off" toggle or button to control the power supply.

3. Energy Statistics and Archiving

The app provides independent energy consumption statistics for each phase and an archiving function for historical data. You can review daily, weekly, or monthly consumption trends.

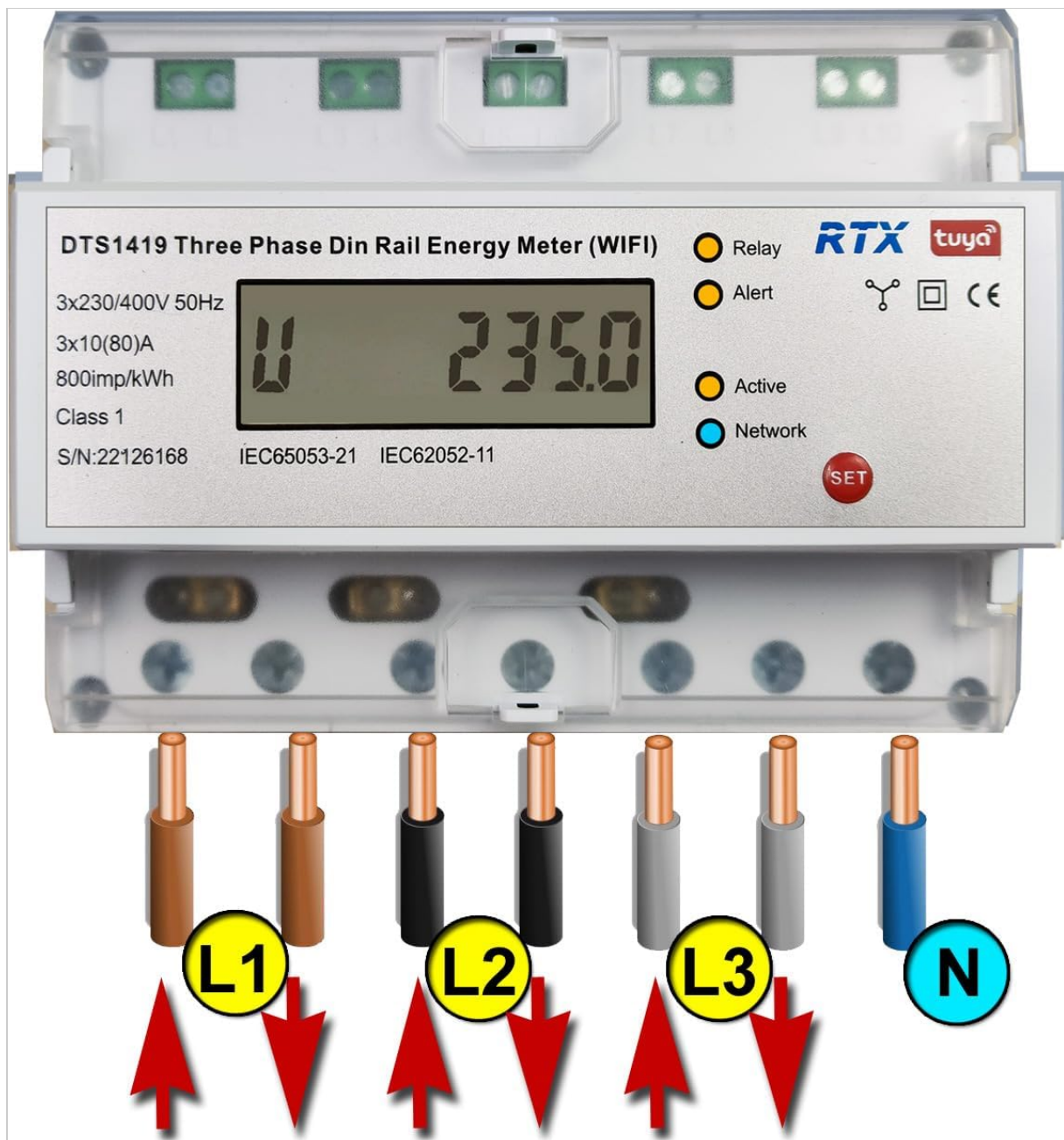


Image Description: A screenshot of the Tuya Smart Life app interface, highlighting sections for "totalEle(kWh)" (total energy consumption) and "Gross generation(kWh)". This illustrates the app's capability to display both consumed and potentially generated energy data.

4. Prepayment Function

Set an energy limit within the Tuya Smart Life app. The device will notify you if this limit is exceeded, allowing for better energy budget management.

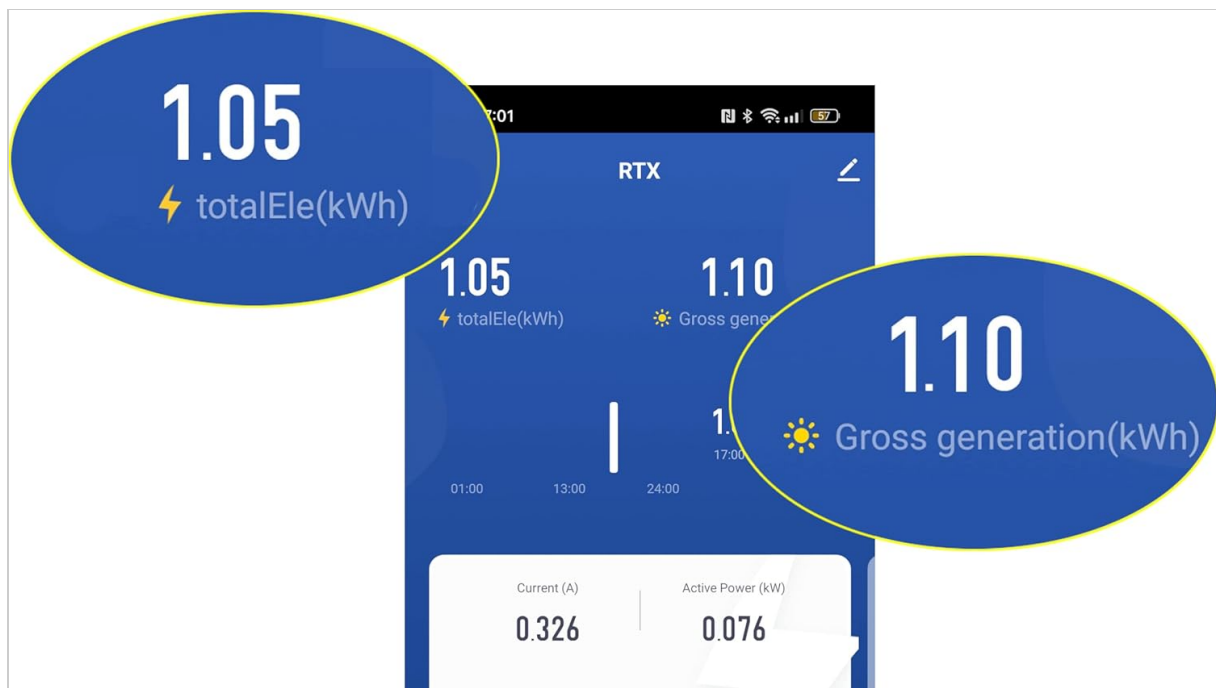


Image Description: A series of three screenshots from the Tuya Smart Life app. The first shows the main device interface. The second shows the "Expense management" screen with options for "Prepayment switch", "Balance energy", "Energy charge", and "Prepaid phone records". The third shows the device in an "Off" state, indicating remote control functionality.

5. Voice Control

Integrate the RTX DTS1419 with Google Home or Amazon Alexa for voice-activated control. Follow the instructions provided by Google Home or Alexa for connecting Tuya Smart Life devices.

- Enable the "Tuya Smart Life" skill/action in your voice assistant app.
- Link your Tuya account.
- Discover devices.
- Use voice commands such as "Alexa, turn off the main power" or "Hey Google, what is the energy consumption of the meter?" (Specific commands may vary based on setup).

6. Automatic Scenarios

Configure automated actions within the Tuya Smart Life app based on predefined measurement values. For example, you can set the device to automatically shut off if the voltage exceeds a safe limit.

- Navigate to the "Smart" or "Automation" section in the Tuya Smart Life app.
- Create a new automation.
- Set conditions based on voltage, current, or power readings from the DTS1419.
- Define actions, such as turning off the meter or sending a notification.

MAINTENANCE

- **Cleaning:** Wipe the device with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Firmware Updates:** Periodically check the Tuya Smart Life app for available firmware updates for the device to ensure optimal performance and security.
- **Connection Check:** Regularly inspect wiring connections for tightness and signs of wear.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not powering on.	No power supply; incorrect wiring.	Check circuit breaker. Verify wiring connections according to the diagram.
Cannot connect to Wi-Fi.	Incorrect Wi-Fi password; 5GHz network; device not in pairing mode; weak signal.	Ensure correct 2.4 GHz Wi-Fi password. Put device in pairing mode (blinking blue LED). Move router closer or use a Wi-Fi extender.
Inaccurate readings.	Loose wiring connections; faulty device.	Check all wiring connections for tightness. If problem persists, contact support.
Remote control not working.	No internet connection; app issue; device offline.	Check your home internet connection. Ensure the device is online in the Tuya app. Restart the app.

SPECIFICATIONS

- **Model:** DTS1419
- **Brand:** RTX
- **Type:** Three-Phase DIN Rail Energy Meter
- **Connectivity:** Wi-Fi (2.4 GHz)
- **Maximum Current:** 80A
- **Continuous Current:** 10A per phase
- **Voltage:** 3x230/400V 50Hz
- **Pulse Constant:** 800imp/kWh
- **Accuracy Class:** 1
- **Compatibility:** Tuya Smart Life App, Google Home, Amazon Alexa
- **Mounting:** 35mm DIN Rail
- **ASIN:** B0CDVLZV9B

WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support, please visit the RTX website or contact their customer service department.

Manufacturer: RTX

Related Documents - DTS1419



[Vibox IV-544 Gaming PC Quick Start Guide](#)

Concise quick start guide for setting up your Vibox IV-544 Gaming PC with Windows 11, including steps for internal checks, display and accessory connections, internet setup, and powering on.



[MSI Katana GF66 11UG-834IT Gaming Laptop Quick Start Guide](#)

A comprehensive quick start guide for the MSI Katana GF66 11UG-834IT gaming laptop. Learn about product overview, essential connections, and function key operations for optimal performance.



[Custom PC Magazine Issue 228: Mini-ITX Builds, Gamepad Reviews & PC Hardware Insights](#)

Explore PC hardware, mini-ITX builds, gamepad reviews, and gaming technology in Custom PC Magazine Issue 228. Featuring in-depth reviews of motherboards, cases, laptops, and more, this issue provides essential insights for PC enthusiasts.



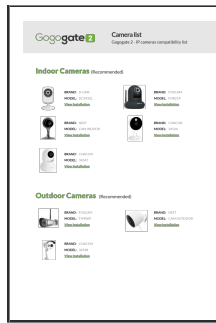
[Cooler Master Cooling X Operational Description - FCC | CE Compliance](#)

Comprehensive operational description for the Cooler Master Cooling X PC, detailing hardware specifications, connectivity options (Wi-Fi, Bluetooth), power supply unit (PSU) features, and RF transmitter technical data. Includes FCC and CE compliance information.



[Lenovo ThinkStation P520 Technical Specifications](#)

Detailed specifications and platform overview for the Lenovo ThinkStation P520, a powerful single-CPU workstation designed for demanding professional tasks. Explore its CPU, memory, storage, and connectivity options.



Gogogate 2 IP Camera Compatibility List

A comprehensive list of IP cameras compatible with the Gogogate 2 system, including brands, model numbers, and installation resources.