

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

> [NUZEZCJG](#) /

> [KWS-306 Power Meter User Manual](#)

NUZEZCJG KWS-306

KWS-306 Power Meter User Manual

Model: KWS-306 | Brand: NUZEZCJG

1. INTRODUCTION

This manual provides essential information for the safe and effective operation of your NUZEZCJG KWS-306 Power Meter. The KWS-306 is a sophisticated 3-Phase 4-Wire KWh Energy Tester with Voltage Protection Relay Switch and a color screen, designed for accurate measurement and protection in electrical systems. Please read this manual thoroughly before installation and use.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the device:

- Installation and maintenance should only be performed by qualified electricians.
- Ensure power is disconnected before any wiring or installation procedures.
- Do not operate the device in wet or damp conditions.
- Verify correct wiring connections according to the provided diagrams to avoid damage or electric shock.
- Do not exceed the specified voltage and current ratings.
- Keep the device away from flammable materials and extreme temperatures.

3. PRODUCT OVERVIEW

The KWS-306 is designed for comprehensive electrical monitoring and protection. Below are key features and components.



Figure 3.1: KWS-306 Power Meter Front View. This image displays the main unit of the KWS-306, highlighting its vibrant color screen which shows real-time voltage, current, and power readings for three phases (A, B, C). The top and bottom terminals for phase and neutral connections are clearly visible, along with the model number KWS-306 on the lower left of the screen.

Model:KWS-306



- ✓ Timed off
- ✓ Over Temperature Protection
- ✓ Power off memory
- ✓ Overvoltage protection
- ✓ Under voltage protection
- ✓ Overcurrent protection
- ✓ Over power protection
- ✓ Voltage imbalance protection
- ✓ Current imbalance protection

Figure 3.2: KWS-306 Key Protection Features. This image illustrates the KWS-306 meter alongside a comprehensive list of its protective functions. These include Timed off, Over Temperature Protection, Power off memory, Overvoltage protection, Under voltage protection, Overcurrent protection, Over power protection, Voltage imbalance protection, and Current imbalance protection. The meter's display shows various electrical parameters.

KWS-306

Multifunctional Rail Meter



-  Power off memory
-  Timed shutdown
-  Overvoltage protection
-  Overcurrent protection
-  Over power protection
-  Over Temperature Protection
-  Voltage imbalance protection
-  Current imbalance protection

Figure 3.3: Multifunctional Rail Meter Capabilities. This image emphasizes the KWS-306 as a multifunctional rail meter. It reiterates the protection features such as Power off memory, Timed shutdown, Overvoltage protection, Overcurrent protection, Over power protection, Over Temperature Protection, Voltage imbalance protection, and Current imbalance protection, presented with clear icons for each function.

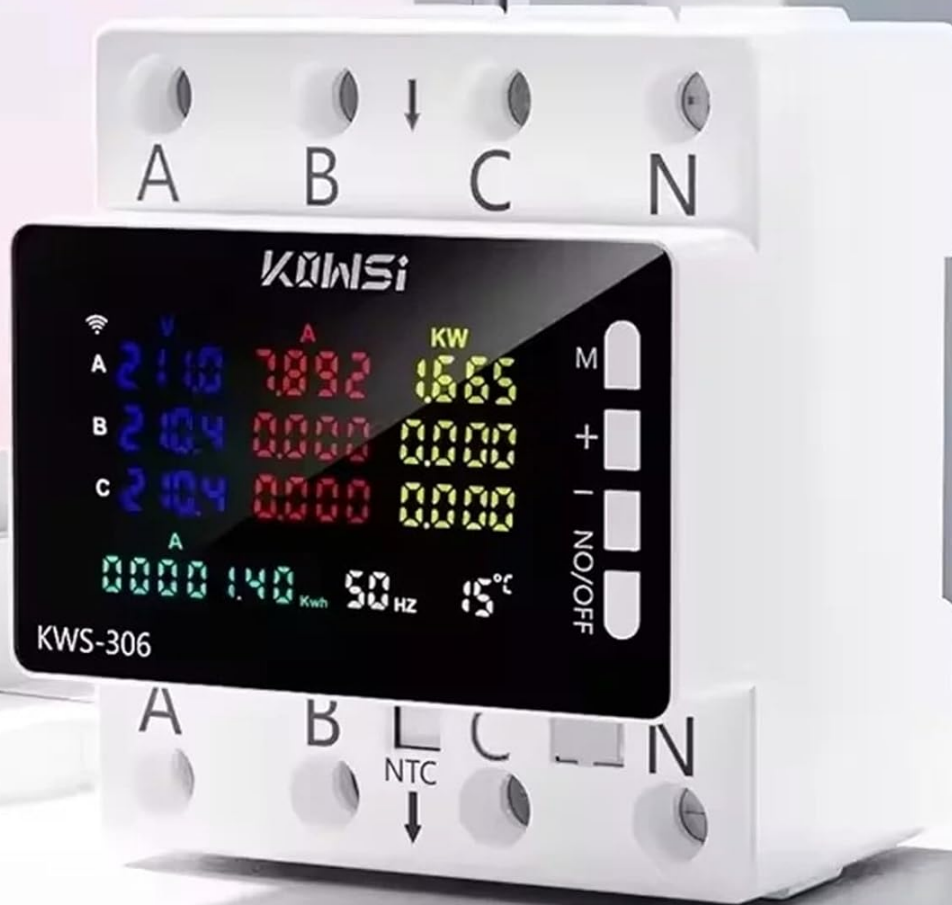
Mobile remote control unlimited distance



Figure 3.4: Mobile Remote Control Capability. This image shows the KWS-306 meter next to a smartphone displaying an application interface, indicating its capability for mobile remote control over an unlimited distance. Note: This feature is typically available only with the KWS-306WF (Wi-Fi) version, not the standard KWS-306 model.

Electric energy meter

Three-phase four-wire rail meter



Only Model **KWS-306WF** with wifi

Figure 3.5: Three-Phase Four-Wire Rail Meter. This image highlights the KWS-306 as an electric energy meter designed for three-phase four-wire systems. It visually confirms the connection points for phases A, B, C, and Neutral (N), emphasizing its suitability for industrial and commercial electrical installations. The note "Only Model KWS-306WF with wifi" clarifies the Wi-Fi capability.

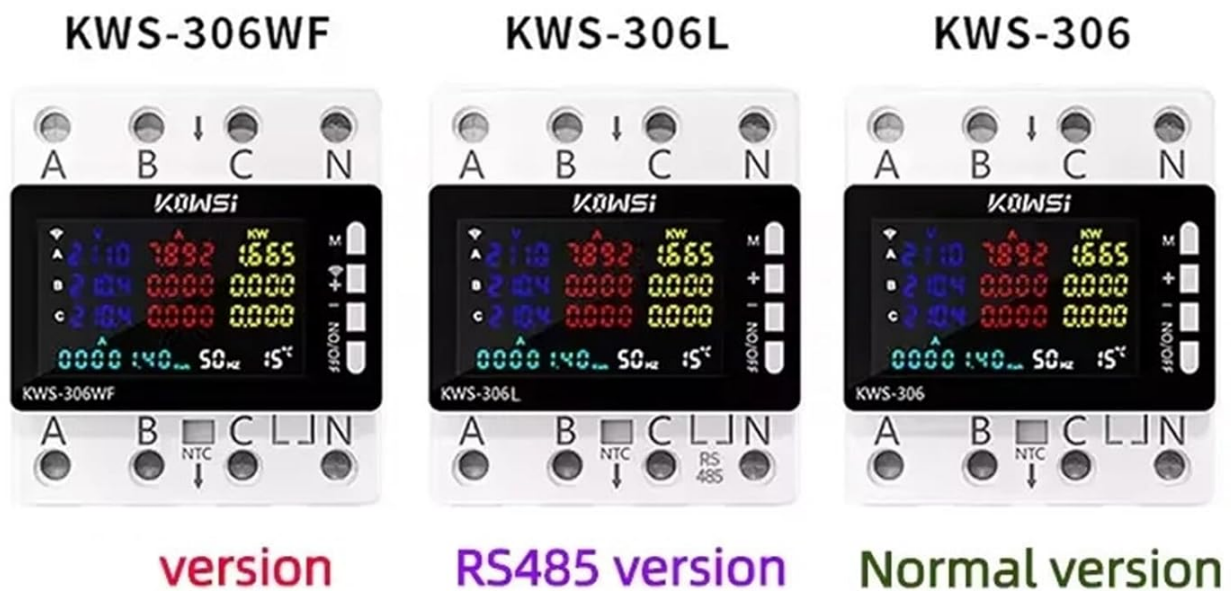


Figure 3.6: KWS-306 Series Model Comparison. This image presents a comparison of three models in the KWS-306 series: KWS-306WF (Wi-Fi version), KWS-306L (RS485 version), and KWS-306 (Normal version). Each meter is shown with its distinct labeling, allowing users to differentiate between the connectivity options available within the product line.

4. SETUP AND INSTALLATION

The KWS-306 is designed for guide rail mounting. Follow these steps for proper installation:

1. **Power Disconnection:** Before beginning any installation, ensure that the main power supply to the circuit is completely disconnected at the breaker or fuse box. Verify with a voltage tester.
2. **Mounting:** Securely mount the KWS-306 onto a standard DIN rail within your electrical panel. Ensure it clicks firmly into place.
3. **Wiring (3-Phase 4-Wire System):**
 - Connect Phase A (L1) to terminal 'A' on the meter.
 - Connect Phase B (L2) to terminal 'B' on the meter.
 - Connect Phase C (L3) to terminal 'C' on the meter.

- Connect the Neutral (N) wire to terminal 'N' on the meter.
 - Ensure all connections are tight and secure to prevent loose contacts and overheating.
4. **Temperature Sensor (NTC):** If applicable, connect the NTC temperature sensor to the designated terminals for ambient temperature monitoring.
 5. **Power Restoration:** Once all connections are verified and secure, restore power to the circuit. The meter should power on and display readings.

Note: Refer to local electrical codes and standards for proper wiring practices.

5. OPERATING INSTRUCTIONS

The KWS-306 features a user-friendly color display and control buttons for easy operation.

5.1 Display Interface

The color screen provides real-time data:

- **Voltage (V):** Displays voltage for each phase (A, B, C).
- **Current (A):** Displays current for each phase (A, B, C).
- **Power (KW):** Displays active power for each phase and total power.
- **Energy (KWh):** Accumulative energy consumption.
- **Frequency (Hz):** System frequency.
- **Temperature (°C):** Ambient temperature reading from NTC sensor (if connected).

5.2 Button Functions

The side buttons (M, +, -, NO/OFF) are used for navigation and control:

- **M (Menu/Mode):** Press to cycle through different display modes or enter menu settings.
- **+ (Up/Increase):** Used to navigate up in menus or increase values.
- **- (Down/Decrease):** Used to navigate down in menus or decrease values.
- **NO/OFF (On/Off/Confirm):** Short press to confirm selections; long press to toggle the relay switch (if configured for control).

5.3 Setting Protection Parameters

The KWS-306 allows setting various protection thresholds. Consult the on-screen menu for specific parameter adjustments (e.g., overvoltage, undervoltage, overcurrent, over-temperature limits). Use the M, +, and - buttons to navigate and adjust values, and NO/OFF to confirm.

6. MAINTENANCE

The KWS-306 is designed for low maintenance. Follow these guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the display and casing. Do not use abrasive cleaners or solvents.
- **Inspection:** Periodically inspect wiring connections to ensure they remain tight and free from corrosion.
- **Environment:** Ensure the operating environment remains within the specified temperature and humidity ranges.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display/Power off	No power supply; Incorrect wiring; Internal fault.	Check main power supply. Verify wiring connections. Contact support if problem persists.
Inaccurate readings	Loose connections; Incorrect calibration (unlikely for user); External interference.	Check and tighten all wiring connections. Ensure no strong electromagnetic interference nearby.
Relay not switching	Protection threshold not met; Manual override; Internal fault.	Verify protection settings. Check if manual override is active.
Screen frozen/unresponsive	Temporary software glitch.	Disconnect power for 30 seconds, then reconnect to reset the device.

8. SPECIFICATIONS

Parameter	Value
Model Number	KWS-306
Voltage Range	AC 85-290V
Current Range	0-80A
Power Range	0-23KW
Frequency Range	50-60Hz
Operating Temperature	-20~150°C
Display Type	Digital Only
Phase	Three Phase
Mounting Type	Bolt-On Mount (Implied DIN Rail)
Power Supply	AC

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact the manufacturer or your point of purchase. Keep your purchase receipt as proof of purchase.

Manufacturer: NUZEZCJG

Refer to the product packaging or the seller's website for the most current contact details.



