

EVURU XTM024

EVURU XTM024 3 Phase 4 Wire Digital Energy Meter Instruction Manual

1. INTRODUCTION

This instruction manual provides essential information for the safe and efficient installation, operation, and maintenance of your EVURU XTM024 3 Phase 4 Wire Digital Energy Meter. Please read this manual thoroughly before installation and keep it for future reference. This device is designed to accurately measure active energy consumption in three-phase four-wire AC power networks.

2. SAFETY INFORMATION

- Installation and maintenance must be performed by qualified electricians only.
- Ensure the power supply is completely disconnected before any installation, wiring, or maintenance procedures.
- Verify that the voltage and current ratings of the meter match the electrical system specifications.
- Do not operate the meter in environments exceeding its specified operating temperature and humidity ranges.
- Avoid exposing the meter to direct sunlight, rain, or excessive dust.
- Do not disassemble or modify the meter. Doing so will void the warranty and may lead to electric shock or fire.

3. PRODUCT OVERVIEW

The EVURU XTM024 is a digital energy meter designed for precise measurement of electrical energy. It features a clear LCD display and is suitable for DIN rail mounting.



Figure 3.1: Overall view of the EVURU XTM024 Digital Energy Meter, showing both the front display and the side profile with the DIN rail mounting mechanism.



Figure 3.2: Close-up of the meter's front panel, highlighting the LCD display, phase indicators (L1, L2, L3), and pulse output LED (400imp/kWh).



Figure 3.3: Rear view of the EVURU XTM024 Digital Energy Meter, illustrating the integrated clip for secure DIN rail mounting.

Key Features:

- Three-phase four-wire measurement.
- LCD 6+2 digit display for energy consumption.
- DIN rail installation.
- High accuracy level (Class 1.0).
- Pulse output for remote monitoring (400imp/kWh).

4. INSTALLATION

The EVURU XTM024 meter is designed for DIN rail mounting. Ensure all safety precautions are followed before proceeding with installation.

4.1 Mounting

1. Turn off the main power supply to the installation area.
2. Locate a standard 35mm DIN rail within an appropriate electrical enclosure.
3. Align the meter's DIN rail clip with the rail and press firmly until it clicks into place.
4. Ensure the meter is securely fastened and cannot move freely.

4.2 Wiring (3 Phase 4 Wire)

Refer to the wiring diagram typically found on the meter's terminal cover or in accompanying documentation. The following is a general guide:

- Connect the three phase lines (L1, L2, L3) to their respective input terminals.
- Connect the neutral line (N) to its input terminal.
- Connect the load's three phase lines (L1, L2, L3) to their respective output terminals.
- Connect the load's neutral line (N) to its output terminal.
- Ensure all connections are tight and secure to prevent loose contacts and overheating.
- If applicable, connect the pulse output terminals to a compatible data acquisition system.

Note: *Incorrect wiring can cause damage to the meter, electrical system, or pose a safety hazard. Always consult a qualified electrician for installation.*

5. OPERATION

5.1 Power On

Once correctly installed and wired, restore power to the circuit. The meter's LCD display should illuminate, and the phase indicator LEDs (L1, L2, L3) will light up if the corresponding phases are active.

5.2 Reading the Display

- The LCD displays the total active energy consumption in kilowatt-hours (kWh). The format is typically 6 digits for integer kWh and 2 digits for decimal kWh (e.g., 000000.00 kWh).
- The pulse indicator LED (often labeled 400imp/kWh) will flash proportionally to the energy being consumed. A faster flash rate indicates higher power consumption.
- The L1, L2, L3 LEDs indicate the presence of voltage on each respective phase.

6. MAINTENANCE

- **Cleaning:** Keep the meter clean and free from dust. Use a soft, dry cloth for cleaning. Do not use

abrasive cleaners or solvents.

- **Inspection:** Periodically inspect the wiring connections for tightness and signs of wear or damage. Ensure the meter is securely mounted.
- **Environment:** Ensure the operating environment remains within the specified temperature and humidity ranges to prolong the meter's lifespan.

No user-serviceable parts are inside the meter. For any internal issues, contact qualified service personnel.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display / Meter not powering on	No power supply; incorrect wiring; internal fault.	Check main power supply. Verify wiring connections. If problem persists, contact support.
Incorrect energy reading	Incorrect wiring; meter fault; external interference.	Re-check wiring against diagram. Ensure meter is correctly rated for the circuit. Contact support if readings are consistently inaccurate.
Pulse LED not flashing	No load connected; very low power consumption; LED fault.	Ensure there is an active load. Check if the main display is accumulating energy.

8. SPECIFICATIONS

Parameter	Value
Model	XTM024
Type	Three Phase Four Wire Electronic Type
Reference Voltage	3 X 220/380V AC, 3 X 230/400V AC
Rated Voltage	AC220V/400V
Reference Current (Base/Max)	3 X 5(80A), 3 X 1.5(6A), 3 X 30(100A)
Accuracy Level	1.0 (IEC62053-21)
Rated Frequency	50Hz
Constant Pulse	400imp / kWh
Display	LCD 6 + 2 digits
Power Consumption	2W, 10VA
Starting Current	0.004lb
Operating Temperature	-20°C ~ 55°C
Storage Temperature	-25°C ~ 70°C
Operating Voltage	0.9-1.1 Rated Voltage
Utmost Voltage	0.8-1.15 Rated Voltage
Average Humidity Value of Year	75%
Humidity Range	20-80%
Installation Method	DIN Rail
Dimensions	Approx. 10.1 X 7.6 X 6.5cm / 3.97 X 2.99 X 2.55in
Weight	Approx. 500g

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact your retailer/manufacturer directly. Keep your purchase receipt as proof of purchase.