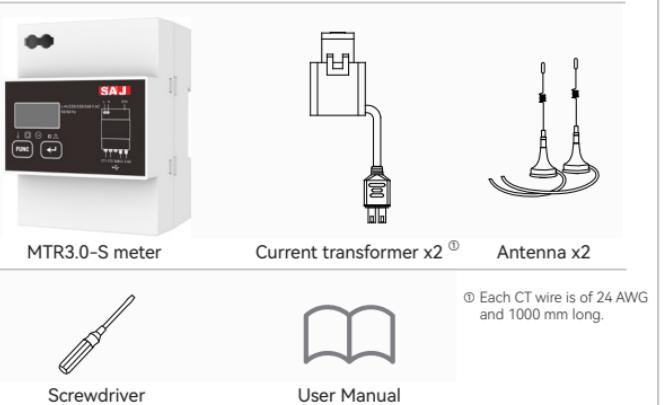


## MTR3.0-S eleX Home Single-Phase Energy Meter User Manual

### 1. Packing List



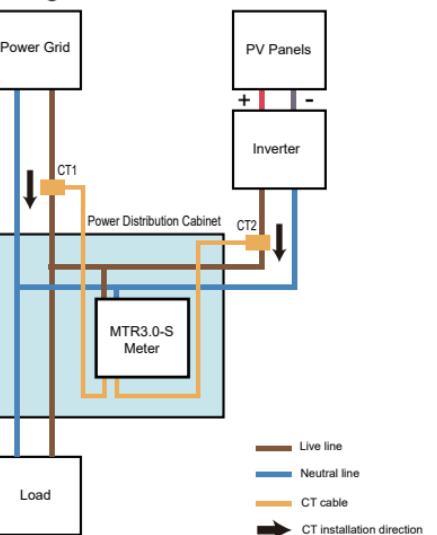
WARNING	
Follow the instructions in this manual to apply, install, and commission this product. Store the manual properly after installation for future reference.	
Do not use accessories that are not specified or recommended by the manufacturer.	
Only professionals should perform necessary maintenance, calibration, and troubleshooting to ensure the normal, safe, and accurate operation and metering of the energy meter.	

### 2. Product Introduction

The MTR3.0-S single-phase energy meter provides the export limit control function for the microinverters in electrical power systems. MTR3.0-S can monitor and detect the real-time export power from the microinverter to the grid and signal the microinverter to lower the power generation when it exceeds the threshold value.

MTR3.0-S can communicate with the microinverters through Sub-1G technology to ensure communication stability. The integration between MTR3.0-S and the microinverters can be configured on the Elekeeper App through Bluetooth, Wi-Fi, or Ethernet connections.

### 3. System Diagram



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### 4. Product Parameters

Electric Parameters	
Rated AC Voltage/Range [V]	L+N, 220, 230, 240/85-300
Rated AC Frequency/Range [Hz]	50, 60/45-65
Rated AC Current [A]	80/120 <sup>①</sup>
Sensor	CT
Overshoot Category	III
Active Accuracy	I
Reactive Accuracy	I
Communication	
Sub-1G Frequency Band [MHz]	410-520, 860-930
LAN	10/100 Mbps, ≤ 100 m
WLAN	STA, 802.11 b/g/n (2,412-2,484 GHz)
Bluetooth	V4.2
Antenna Type	External
Environmental Parameters	
Ambient Temperature	-25°C to +60°C
Storage Temperature	-45°C to +80°C
Relative Humidity	≤ 95%
Altitude [m]	2000
Ingress Protection	IP20
General Parameters	
Installation	DIN35 Rail
Dimensions (W x H x D) [mm]	72 × 98 × 65.5
Weight [g]	172
Warranty [Year]	5
Applicable Standard	INMETRO, ANATEL, TISI, NTC, CE-MID, CE-RED

① The rated current of the external sampling CT is 80 A or 120 A.

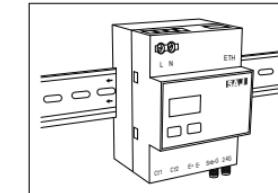
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### 5. Installation Instructions

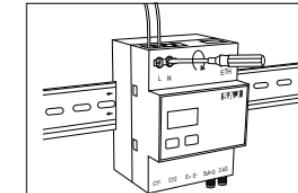
#### DANGER

- Cut off the power supply before any operation on the meter to avoid electric shock that could result in death or severe injury.
- Use insulated tools and test for electricity before any operating.
- An overloaded current transformer accessory can lead to overheating of internal components.
- Do not expose this device to damp or rainy conditions to avoid the risk of fire or electric shock. Install the device in a location with proper ventilation.

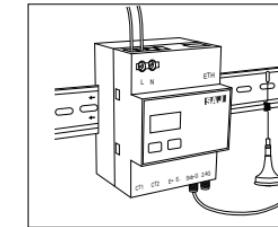
- Before the installation, prepare the L and N connection wires of 18 AWG.
- The MTR3.0-S meter can only be installed indoors.



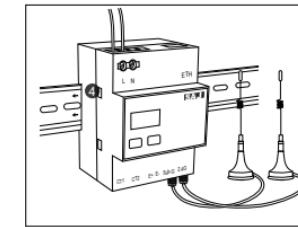
① Install the meter on the DIN rail.



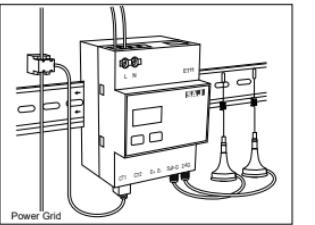
② Connect the L and N power supply wires.



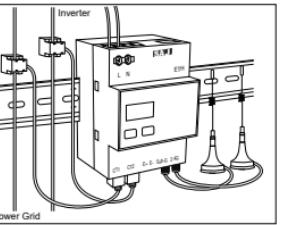
③ Connect the Sub-G antenna.



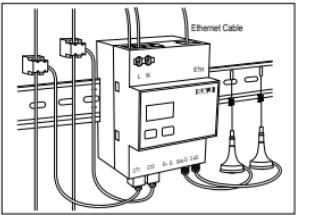
④ Connect the 2.4G antenna.



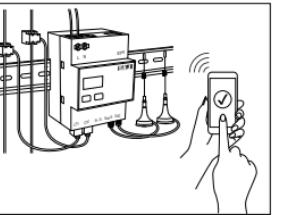
5 Connect one end of one current transformer to the meter CT1 port, and then the other end to grid L1 line. The CT arrow must point to the load.



6 Connect one end of the other current transformer to the meter CT2 port, and then the other end to inverter L1 line. The CT arrow must point to the load.



⑦ (Optional) Plug in the Ethernet cable to ensure stable communication when the meter is far away from the router.



- Complete commissioning on the App through Bluetooth connection.

**! Notice**

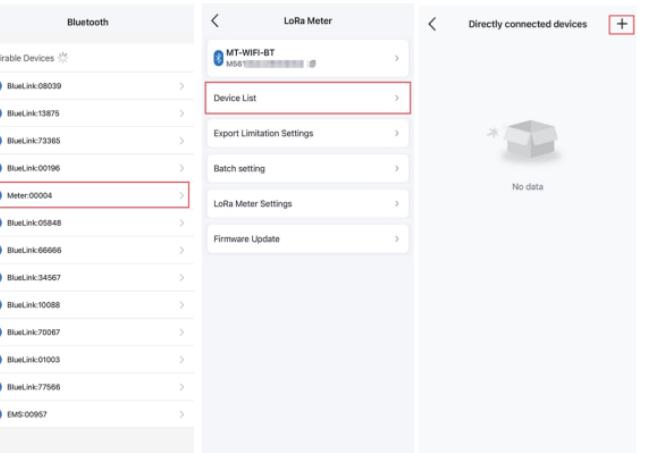
- Regularly clean the dust on the surface of the energy meter with clean and dry cloth only to maintain good ventilation and heat dissipation.
- Any unauthorized actions including modification of product functionality of any form may cause lethal hazard to the operator, third parties, the units or their property. SAJ is not responsible for the loss and these warranty claims.

## 6. Commissioning on Elekeeper App

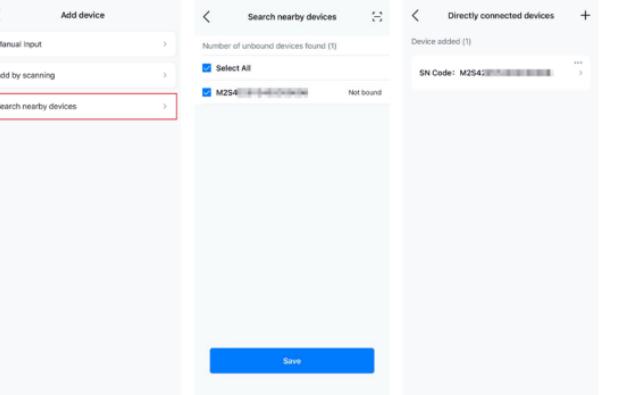
4. Download the Elekeeper App and log in to the App. For detailed instructions, refer to the microinverter User Manual.



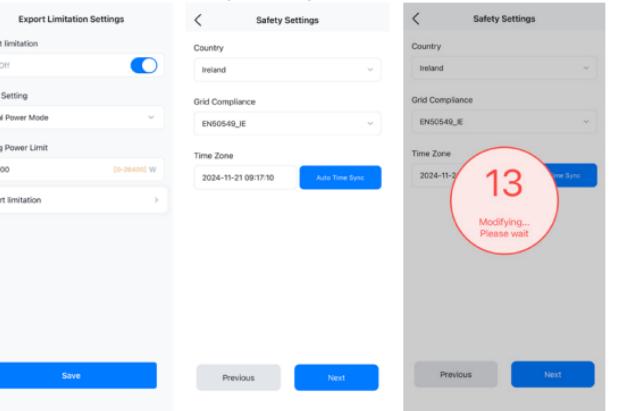
Connect to the METR3.0-S meter through Bluetooth connection.



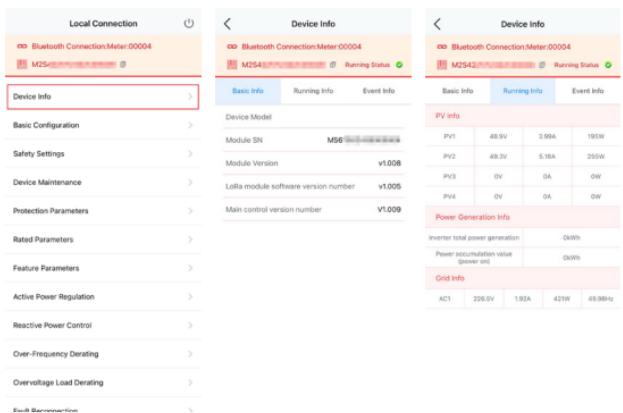
Pair the meter with the microinverter. Select one of the three methods to find the microinverter. For example:



Set initialization and the export limit parameters.



5. Monitor the running statistics of the meter and the microinverter.



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