TEECOO

European V1.0
Nov. 2026

PowerRouter

Datasheet

Intelligent Energy Routing & Management System





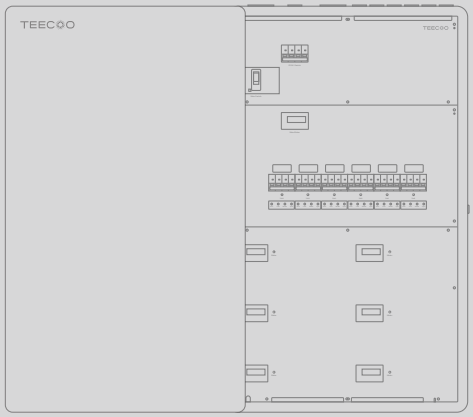
POWERROUTER

Built for flexible energy sharing

Smart distribution | Multi-unit support | Local energy records

Long-Term Local Records

Local electricity usage / billing records retained for 1 year as standard and can be expaneded to 25 years.



PowerRouter

PERFORMANCE SPECIFICATIONS

Max. Phase Voltage	**277 V**
Max. Phase Current	**100 A**
Grid Topology	**3L/N/PE**
Nominal Voltage (L-N / L-L)	**220/380 V, 230/400 V, 240/415 V**
Grid Frequency / Frequency Range	**50/60 Hz; 45–55 Hz (50 Hz system),**
Supported apartments/meters	**55–65 Hz (60 Hz system)**
Maximum units in parallel	**6**
Energy Distribution	**16**
Local Electricity Bill Retention Period	**Smart Energy Sharing**
Open Ecosystem	**1 year stndaard; up to 25 years**
Built-in Metering Equipment	**Yes**
Phase Sequence Protection	**Yes**
OTA	**Yes**

GENERAL DATA

Dimensions (WxDxH)	**650 x 150 x 1,100 mm**
Weight	**55 kg**
Operating Temperature	**-30 to +50 °C**
Cooling Method	**Natural Convection**
Self-consumption	**< 12 W**
Communication	**CAN, RS485**
Altitude	**3000 m**
Environment	**Indoor**
User Interface	**TEECOO App**
Limited Warranty	**10 years**

GRID INPUT

Nominal Phase Voltage	**220 V / 230 V / 240 V**
Max. Phase Voltage	**277 V**
Max. Phase Current	**50 A**
Grid Topology	**3L/N/PE, L/N/PE**
Grid Frequency / Frequency Range	**50/60 Hz; 45–55 Hz (50 Hz system), 55–65 Hz (60 Hz system)**

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AC OUTPUT

Nominal Phase Voltage	**220 V / 230 V / 240 V**
Max. Phase Voltage	**277 V**
Max. Phase Current	**50 A**
Max. Monitoring Phase Current	**80 A**
Grid Topology	**3L/N/PE, L/N/PE**
Grid Frequency / Frequency Range	**50/60 Hz; 45–55 Hz (50 Hz system), 55–65 Hz (60 Hz system)**

GENERAL DATA

Power Switch	**Smart Switch**
Back-up transfer time	**< 4 ms**
AC / Grid Monitoring	**Yes**
Phase Sequence Protection	**Yes**
AC Output Over-current Protection	**Yes**
AC Output Short-circuit Protection	**Yes**
AC Output Over-voltage Protection	**Yes**
AC Output Under-voltage Protection	**Yes**

	Edge Box-B	Edge Box-A	Edge Box-AI

HARDWARE CONFIGRATION

CPU Core	**ARM Cortex-M4**	**ARM Cortex-M4**	**ARM Cortex-M55**
NPU	**None**	**None**	**Yes**
Digital Input	**None**	**× 2, ≤ 20 m**	**× 4, ≤ 20 m**
Digital Output	**None**	**× 2, ≤ 20 m**	**× 4, ≤ 20 m**
Interaction	**LED, APP**	**4.3-inch Touch LCD, APP**	**4.3-inch Touch LCD, APP**
Interface			
LAN	**× 2, 10/100Mbps, ≤ 100m**	**× 2, 10/100Mbps, ≤ 100m**	**× 2, 10/100Mbps, ≤ 100m**
CAN	**× 2, ≤ 30m**	**× 2, ≤ 30m**	**× 3, ≤ 30m**
RS485	**× 5, ≤ 300m**	**× 5, ≤ 300m**	**× 7, ≤ 300m**
WiFi	**1**	**1**	**1**
Bluetooth	**1**	**1**	**1**
Measurement			
Voltage Channel	**None**	**3**	**9**
Current Channel	**None**	**3**	**9**

FUNTION

Self-consumption	**Yes**	**Yes**	**Yes**
Time-based Charge And Discharge	**Yes**	**Yes**	**Yes**
Anti-backflow (Reverse Power Limitation)	**Yes**	**Yes**	**Yes**
Local Operation (Offline)	**Yes**	**Yes**	**Yes**
Max. Number of Paralleled Power Routers	**6 (36 Users)**	**12 (72 Users)**	**16 (96 Users)**

	Edge Box-B	Edge Box-A	Edge Box-AI
FUNTION			
Max. Number of Virtual Users	**None**	**8**	**16**
Local data retention period	**10 Days**	**8 Years**	**16 Years**
Local Energy Billing (Offline)	**None**	**Yes**	**Yes**
Local Energy Billing Retention Period (Offline)	**None**	**Yes**	**Yes**
Load Priority Management	**None**	**Yes**	**Yes**
Heat Pump Linkage	**None**	**Yes**	**Yes**
AC EV Charger Linkage	**None**	**Yes**	**Yes**
Dynamic Tariff	**None**	**Yes**	**Yes**
AI Load Forecasting	**None**	**None**	**Yes**
AI PV Forecasting	**None**	**None**	**Yes**
Custom Scripts	**None**	**None**	**Yes**
POWER SUPPLY			
DC Voltage	**PoE (Special Specification) / 12~24 V (External Power Supply)**		
Typical power consumption	**5 W**	**8 W**	**10 W**
PROTECTION			
Dimensions (HxWxD)	**100 × 145 × 30 mm**	**100 × 145 × 45 mm**	**100 × 145 × 60 mm**
Weight	**0.5 kg**	**0.5 kg**	**0.5 kg**
Operating Temperature	**-20 to +70 °C**	**-20 to +70 °C**	**-20 to +70 °C**
Ingress Protection	**IP20**	**IP20**	**IP20**
Humidity	**0-100 %**	**0-100 %**	**0-100 %**
Altitude	**3,000 m**	**3,000 m**	**3,000 m**
Environment	**Indoor**	**Indoor**	**Indoor**

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TEECOO GmbH.
Address
Tel