mappee

Smappee MID meter



- Add billable data to the Smappee Infinity ecosystem.
- Three Phase 100A direct fed.
- MID B+D certified.
- Accuracy class 0.5 (Active Energy).
- Bi-directional measurements for kW and kWh.

The Smappee MID meter is a calibrated polyphase multifunction kWh meter. It measures and displays the characteristics of single or 3-phase loads with a range of up to 100 A. Its measurements can be used for official energy registrations and billing purposes. The Smappee MID meter is part of the Smappee ecosystem* and communicates via Modbus RTU (RS-485) with the Smappee Connect. This way you can also consult the data in the Smappee App and Dashboard or any other system via API in addition to reading the data directly from the display of the meter. The meter was certified in the UK according to EU Directive 2014/32/EU and has MID Certificate number 0120 / SGS0462.

ARTICLE NUMBER: I1-EN3-1

DIN rail dimensions: 72 × 100 mm **Mounting:** DIN rail (DIN 43880)

Weight: 340 g

Operating temperature: -25 °C to 55 °C Storage temperature: -40 °C to 70 °C Reference temperature: $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative humidity: 0% - 95%.

non-condensing

Operating altitude: 0 – 2,000 m (0 – 6,562 feet)

International standard: IEC 62053-21 /

EN50470-1/3

Accuracy class: Class 1 / Class B

IP rating: IP 51

Intended environment conditions:

Pollution degree 2

Overvoltage conditions: overvoltage CAT III

Mechanical environment: M1
Electromagnetic environment: E2

Electrostatic discharges: 8 kV contact/

15 kV air gap

Electromagnetic HF fields: IEC 61000-4-3

Electrical fast transients: 4 kV

Nominal voltage (Un): $3 \times 230/400 \text{ V AC}$ Operational voltage: $80 \% \sim 120 \%$ of Un AC voltage withstand: 4 KV for 1 minute Impulse voltage withstand: 6 KV - 1.2 µS

Basic current (lb): 10 A

Maximum rated current (lmax): 100A

Operational current range: 0.4 % lb - lmax

Over current withstand: 30 lmax for 0.01 s

Frequency: 50/60 Hz

Power consumption per phase: $\leq 2 \text{ W} / 10 \text{ VA}$

Display: LCD

Modbus RTU (RS-485) interface:

- Type: RS485 semi-duplex

- Connections: 2-wire, maximum distance 1 000 m

Address range: 1 - 247Max. bus loading: 8pcsProtocol: Modbus RTUParity: EVEN/ODD/NONE

- Data bit: 8

- Baud-rate: 38.400 bit/sec