

EM111-RTU-2P-M-T

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product currently not yet
available, Data sheet for
information only

**Core functions of energy data acquisition**

The BasicLine devices measure power characteristics of single-phase or three-phase loads.

For this purpose, basic values are provided to make the energy demand of a system transparent.

The essential values are displayed directly on the unit and communicated via a network.

Our devices are suitable either for mounting on top hat rails or in the front panel.

By focusing on core functions, the BasicLine devices have a very good cost-benefit ratio.

General ordering data

Version	Power measurement/display for 1-phase mains, 45 A, direct measurement, pulse output, Modbus RTU, MID approval
Order No.	2926870000
Type	EM111-RTU-2P-M-T
GTIN (EAN)	4099986650367
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	62 mm	Depth (inches)	2.4409 inch
Height	90 mm	Height (inches)	3.5433 inch
Width	17.5 mm	Width (inches)	0.689 inch
Net weight	90 g		

Temperatures

Storage temperature Operating temperature

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl
REACH SVHC	Lead 7439-92-1

Measuring current input

Housing main material	Plastic	Rated current	5 A
AC input cable connection	Directly at the device	Current-measuring channels	1
Measuring accuracy for current	0.5 %	Max. current	45 A

Measuring voltage input

Low voltage network	1 phase 2 wire (L + N)	Measuring accuracy for voltage	0.5 %
Three-wire system	No	Measurement range, voltage L-N, AC	176...276 V
Four-wire system	No		

Communication

Baud rate	≤ 9600 Bd	Communication	Bi-directional
Parity	none, even, odd	Stop bits	1, 2
Addressing	1 - 247	Interface	RS485
Protocol	Modbus RTU		

Inputs/outputs

Input type	1 phase AC (L1, N)	Digital output configurable	Yes
Number of digital inputs	0	Number of digital outputs	0
Number of pulse outputs	2		

Measurement data recording

Software EM configuration tools

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Display value	Voltage, current measured value, Apparent power, Reactive power, Power factor, Frequency, Import / export active power demand, Total import / export active energy, Total import / export reactive energy, Total system power demand	Version	Power measurement/ display for 1-phase mains, 45 A, direct measurement, pulse output, Modbus RTU, MID approval
Type of mounting	DIN rail	Protection degree	Front panel: IP51, IP20
Rated current	5 A	Power factor input	1 %
Measurement accuracy	Class 1 (IEC 62053-21), Class B (EN 50470-3), 0.5% in relation to final value (U / I)	Max. current	45 A
Display monitoring (monitor)	LCD	Measurement range, voltage L-N, AC	176...276 V
Three-wire system	No	Four-wire system	No
Sampling frequency 50/60 Hz	40 kHz	Measurement result per second	100 ms
Current-measuring channels	1	Measuring accuracy for voltage	0.5 %
Measuring accuracy for current	0.5 %		

Insulation coordination

Impulse withstand voltage	6 kV (1.2/50 µs)	Insulation voltage input or output/supply	4 kVeff / 1 min.
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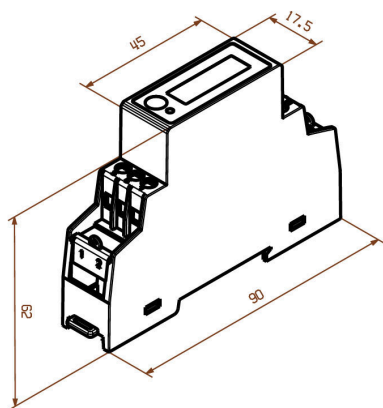
Connection data

Stripping length	8 mm	Type of connection	Screw connection
Wire cross-section, solid, min.	1 mm ²	Wire cross-section, solid, max.	2.5 mm ²
Wire connection cross section, finely stranded, two clampable wires, min.	2.5 mm ²	Wire cross-section, finely stranded, two clampable wires, max.	10 mm ²

Classifications

ETIM 8.0	EC002301	ETIM 9.0	EC002301
ETIM 10.0	EC002301	ECLASS 14.0	27-14-23-30
ECLASS 15.0	27-14-23-30		

Drawings



Wiring example

