

EM122-RTU-MID

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

General ordering data

Version	Power measurement/display for 1-, 3-phase mains, 100 A, direct measurement, pulse output, Modbus RTU, MID approval
Order No.	3099210000
Type	EM122-RTU-MID
GTIN (EAN)	4099987133838
Qty.	1 items

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Technical data

Approvals

ROHS	Conform
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Dimensions and weights

Depth	66 mm	Depth (inches)	2.5984 inch
Height	100 mm	Height (inches)	3.937 inch
Width	72 mm	Width (inches)	2.8346 inch
Net weight	328.3 g		

Temperatures

Storage temperature	-40 °C...70 °C	Operating temperature	-25 °C...55 °C
Humidity at operating temperature	0...90 % (no condensation)	Humidity	0...90 % (no condensation)

Measuring current input

Housing main material	Plastic	AC input cable connection	Directly at the device
Current-measuring channels	3	Measuring accuracy for current	0.5 %
Max. current	100 A		

Measuring voltage input

Low voltage network	3 phase 4 wire (L1 + L2 + L3 + N), 3 phase 3 wire (L1 + L2 + L3), 1 phase 2 wire (L + N)	Voltage type	AC
Frequency range, max.	65 Hz	Frequency range, min.	45 Hz
Measuring accuracy for voltage	0.5 %	Three-wire system	Yes
Measurement range, voltage L-L, AC	400 V	Measurement range, voltage L-N, AC	3 x 230 V
Four-wire system	Yes		

Communication

Baud rate	9600/19200/38400 bit/s	Communication	Bi-directional
Parity	odd, none, even	Stop bits	1, 2
Addressing	1 - 247	Interface	RS485
Protocol	Modbus RTU		

Inputs/outputs

Digital output configurable	Yes	Number of digital inputs	0
Number of digital outputs	0	Number of pulse outputs	2
Temperature input	No		

Measurement data recording

Software	EM configuration tools
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Technical data

Display value	Voltage, current measured value, Apparent power, Reactive power, Power factor, Frequency, Import / export active power	Version	Power measurement/display for 1-, 3-phase mains, 100 A, direct measurement, pulse
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	demand, Total import / export active energy, Total import / export reactive energy, Total system power demand		output, Modbus RTU, MID approval
Input frequency	50/ 60 Hz	Display	LCD
Type of mounting	DIN rail	Protection degree	IP5 1
Pollution severity	2	Power factor input	1 %
Measurement accuracy	Class 0.5	Max. current	100 A
Display monitoring (monitor)	LCD	Measurement range, voltage L-N, AC	3 x 230 V
Measurement range, voltage L-L, AC	400 V	Surge voltage category	III
Supply voltage	230 V	Three-wire system	Yes
Four-wire system	Yes	Sampling frequency 50/60 Hz	4.1 kHz
Continuous measurements	Yes	Measurement result per second	100 ms
Current-measuring channels	3	Measuring accuracy for voltage	0.5 %
Measuring accuracy for current	0.5 %		

Voltage quality measurement

Brief interruptions Yes

Insulation coordination

Impulse withstand voltage	6 kV (1.2/50 µs)	Surge voltage category	III
Pollution severity	2	Tolerance class	0,5
Insulation voltage input or output/supply 4 kVeff / 1 min.			

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		