

EM122-MBUS-MID**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Discover our high-quality energy meters with MID approval.

- Measuring instruments according to the European Measurement Instrumentation Directive MID 2014/32/EU fulfil the legal requirements for use in the billing of energy consumption. This offers legal security for both the operator of the measuring instruments and the end consumer.
- Our portfolio supports various protocols such as Modbus RTU and Ethernet as well as M-Bus for use in building automation for recording energy, water and gas consumption.

General ordering data

Version	100 A, Power measurement/display for 1-, 3-phase mains, direct measurement
Order No.	3141020000
Type	EM122-MBUS-MID
GTIN (EAN)	4099987460743
Qty.	1 items

EM122-MBUS-MID

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Approvals

ROHS	Conform
------	---------

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	246.8 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 (L1 + L2)	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	Communication	Bi-directional
Stop bits	2, 1	Protocol	M-Bus

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
----------	------------------------

Technical data

Display value	current measured value, Voltage, Apparent power	Version	100 A, Power measurement/display for 1-, 3-phase mains, direct measurement
Input frequency	50/ 60 Hz	Display	LCD
Type of mounting	DIN rail	Protection degree	IP51
Pollution severity	2	Power factor input	1 %

EM122-MBUS-MID

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

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	Supply voltage	230 V
Three-wire system	Yes	Four-wire system	Yes
Continuous measurements	Yes	Current-measuring channels	3
Measuring accuracy for voltage	0.5 %	Measuring accuracy for current	0.5 %
Measurement accuracy for active energy Class 0.5 (kWh, .../5 A)			

Voltage quality measurement

Brief interruptions	Yes
---------------------	-----

Insulation coordination

Impulse withstand voltage	6 kV (1.2/50 µs)	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		