

ENERGY METER 520-230

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Energy meters

Many companies would like to save energy at source, use energy more efficiently and maximise the availability of energy networks. This not only shows responsibility, but is also recommended for economic reasons.

Weidmüller energy meters can do far more than just measure the consumption of electrical energy. For example, the basic parameters for energy quality can also be determined or the currents of all conductors can be analysed individually or differentially - e.g. with our Energy Meter. This allows you a quick status overview of the electrical energy in your production facility. This applies both in relation to efficient usage, as well as to quality, stability and availability.

General ordering data

Version	Supply voltage : 230 V
Order No.	2500880000
Type	ENERGY METER 520-230
GTIN (EAN)	4050118513936
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	48 mm	Depth (inches)	1.89 inch
Height	96 mm	Height (inches)	3.78 inch
Net weight	265 g	Width	96 mm
Width (inches)	3.78 inch		

Temperatures

Storage temperature	-25 °C...70 °C	Humidity at storage temperature	0...90 % RH
Operating temperature	-10 °C...55 °C	Humidity at operating temperature	0 - 75% RH

Measuring current input

Current-measuring channels	3	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1.-40.	Measuring accuracy for current	0.2 %
Rated current	1 / 5 A	Residual current measuring	No

Measuring voltage input

Distortion factor THD-U in %	Yes	Four-wire system	Yes
Harmonics, per order / voltage	1.-40.	Measurement range, voltage L-L, AC	480 V
Measurement range, voltage L-N, AC	277 V	Measuring accuracy for voltage	0.2 %
Quadrants	4	Three-wire system	Yes

Communication

Interface	RS485: 9,6 – 115,2 kbps	Protocol	Modbus RTU
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Inputs/outputs

Number of digital outputs	2	Number of pulse outputs	2
Display	LCD with backlit display, 2 keys	Temperature input	No

Measurement data recording

Memory; minimum and maximum values	Yes	Update interval register	200 ms
Software	ecoExplorer go®	Integrated logic	Yes

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Technical data

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Protection degree	IP20, IP40	Rated current	1 / 5 A
Standards	EN 61326-1, IEC 61010-1, IEC 61010-2-030	Measurement range, voltage L-N, AC	277 V
Measurement range, voltage L-L, AC	480 V	Surge voltage category	300 V CAT III
Voltage supply	90 - 277 V AC (50/60 Hz), 90 - 250 V DC	Supply voltage	230 V
Three-wire system	Yes	Four-wire system	Yes
Quadrants	4	Sampling frequency 50/60 Hz	25.6 kHz
Continuous measurements	Yes	Measurement result per second	5
Effective value from the period (50/60 Hz)	10 / 12	Residual current measuring	No
Current-measuring channels	3	Measuring accuracy for voltage	0.2 %
Measuring accuracy for current	0.2 %	Measurement accuracy for active energy (kWh, .../5 A)	Class 0.5S
Operating-hours counter	Yes	Bimetal function	Yes

Voltage quality measurement

Harmonics, per order / voltage	1-40.	Harmonics, per order / current	1-40.
Distortion factor THD-U in %	Yes	Distortion factor THD-I in %	Yes
Unbalanced	No	Positive, negative and zero system	Yes
Brief interruptions	No	Sequence-of-events recorder function	No

Insulation coordination

Surge voltage category	300 V CAT III
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Classifications

ETIM 6.0	EC002301	ETIM 7.0	EC002301
ECLASS 9.0	27-14-23-30	ECLASS 9.1	27-21-03-01
ECLASS 10.0	27-14-23-30	ECLASS 11.0	27-14-23-30

Approvals

Approvals



Approvals	CE
ROHS	Conform
UL File Number Search	E469563

Downloads

Approval/Certificate/Document of Conformity	EU-Declaration of Conformity
Software	MODBUS address list Win64 - ecoExplorer.go
User Documentation	Quick Guide German/English Manual ECOEXPLORER GO English Manual Energy Meter 520 German/English
Brochure/Catalogue	Catalogues in PDF-format

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Catalogue status 09.04.2021 / We reserve the right to make technical changes.

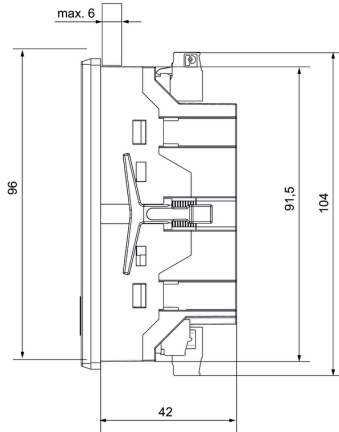
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Drawings

Dimensioned drawing



Dimensioned drawing

