

ENERGY METER 520-230**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Energy meters - ValueLine

Advanced functionality of energy data capture

The scope of performance of the ValueLine energy meters goes beyond the core functions of energy measurement.

They are also suitable for determining, storing and visualising further energy quality parameters.

The free "ecoExplorer go" software is available for most types of the product group, on the one hand for device configuration / commissioning / visualisation of the measured values and on the other hand for analysing the power quality.

General ordering data

Version	Power measurement/display for 1-, 3-phase mains
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
Width	96 mm	Width (inches)	3.78 inch
Net weight	265 g		

Temperatures

Storage temperature	-40 °C...70 °C	Humidity at storage temperature	0...90 % (no condensation)
Operating temperature	-10 °C...55 °C	Humidity at operating temperature	0...90 % (no condensation)

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
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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Protection degree	IP20, IP40	Rated current	1 / 5 A
Version	Power measurement/display for 1-, 3-phase mains	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 ms	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
ETIM 8.0	EC002301	ETIM 9.0	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
ECLASS 12.0	27-14-23-30	ECLASS 13.0	27-14-23-30

Approvals

Approvals



Approvals	CE
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E469563

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Technical data

Downloads

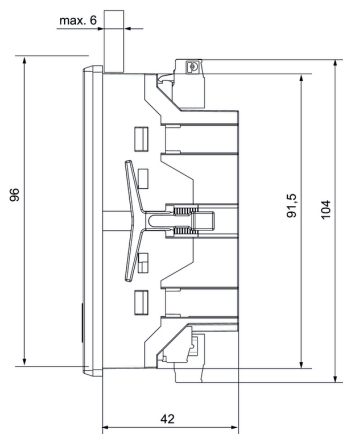
Approval/Certificate/Document of Conformity	Application notes – Declaration of Conformity
Engineering Data	CAD data – STEP
Software	MODBUS address list Win64 - ecoExplorer go
User Documentation	Quick Guide German/English Application notes – Manual ECOEXPLORER GO English Manual Energy Meter 520 German/English
Catalogues	Catalogues in PDF-format

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www.weidmueller.com**Drawings****Dimensioned drawing****Dimensioned drawing**