

ENERGY METER 610-PB-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.	2540870000
Type	ENERGY METER 610-PB-230
GTIN (EAN)	4050118552997
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	65 mm	Depth (inches)	2.559 inch
Height	96 mm	Height (inches)	3.78 inch
Width	96 mm	Width (inches)	3.78 inch
Net weight	250 g		

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	4	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1.-40.	Measuring accuracy for current	0.2 %
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, Profibus DP, USB	Protocol	Modbus RTU, Profibus DP V0
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Inputs/outputs

Number of digital inputs	4	Number of digital outputs	6
Number of pulse outputs	6	Temperature input	No

Measurement data recording

Memory; minimum and maximum values	Yes	Memory size	256 MB
Number of memory values	10,000 k	Update interval register	200 ms
Min. memory recording interval	60 s	Software	ecoExplorer go®
Integrated logic	Yes		

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Protection degree	IP20, IP40	Version	Power measurement/dis- play for 1-, 3-phase mains
Standards	DIN EN 61326-1, IEC 61010-1, IEC 61010-2-030	Measurement range, voltage L-N, AC	
Measurement range, voltage L-L, AC	480 V		277 V
Voltage supply	90 - 277 V AC (50/60 Hz), 90 - 250 V DC	Surge voltage category	300 V CAT III
Three-wire system	Yes	Supply voltage	230 V
Quadrants	4	Four-wire system	Yes
Continuous measurements	Yes	Sampling frequency 50/60 Hz	25.6 kHz
Effective value from the period (50/60 Hz)	10 / 12	Measurement result per second	5 ms
Current-measuring channels	4	Residual current measuring	No
Measuring accuracy for current	0.2 %	Measuring accuracy for voltage	0.2 %
Operating-hours counter	Yes	Measurement accuracy for active energy (kWh, .../5 A)	Class 0.5S
Clock	Yes	Weekly time switch	No
		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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www.weidmueller.com**Technical data****Downloads**Approval/Certificate/Document of Con-
formity[Application notes – Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Software

[Device description – MODBUS address list](#)[Runtime Software – GSD DATA](#)[Win64 - ecoExplorer go](#)[Driver – USB File](#)

User Documentation

[Device description – Quick Guide German/English](#)[Application notes – Manual ECOEXPLORER GO English](#)[Application notes – Manual Energy Meter 610 PB German/English](#)

Catalogues

[Catalogues in PDF-format](#)

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Drawings

Dimensioned drawing

