

ENERGY METER 525-24

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

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

Type	ENERGY METER 525-24
Order No.	2540880000
Version	Supply voltage : 24 V
GTIN (EAN)	4050118553208
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Width	96 mm	Width (inches)	3.78 inch
Height	96 mm	Height (inches)	3.78 inch
Depth	48 mm	Depth (inches)	1.89 inch
Net weight	250 g		

Temperatures

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

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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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	Ethernet	Protocol	Modbus TCP/IP, Modbus RTU over Ethernet, SNMP
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Inputs/outputs

Temperature input	No
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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**Technical data**

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	24 - 90 V AC (50/60 Hz), 24 - 90 V DC	Supply voltage	24 V
Three-wire system	Yes	Four-wire system	Yes
Quadrants	4	Sampling frequency 50/60 Hz	25.6 kHz
Continuous measurements	Yes	Effective value from the period (50/60 Hz)	10 / 12
Measurement result per second	5	Residual current measuring	No
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
Weekly time switch	No	Current-measuring channels	3
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	UNSPSC	39-12-15-35

Approvals

Approvals



Approvals	CE
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	EU-Declaration of Conformity
Engineering Data	STEP
Software	MODBUS address list Win64 - ecoExplorer.go
User Documentation	Quick Guide German/English Manual Energy Meter 525 German English Manual ECOEXPLORER GO English

Creation date May 2, 2020 6:12:41 AM CEST

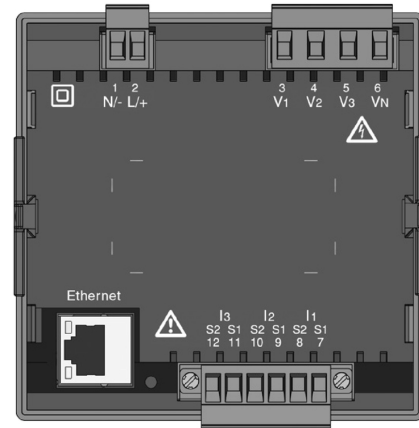
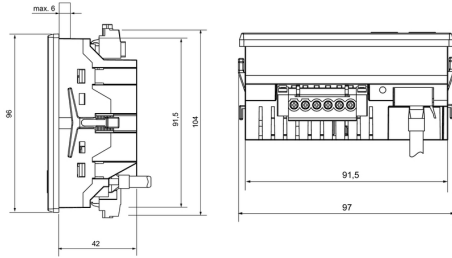
Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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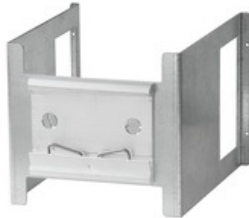
Drawings

Dimensioned drawing



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Accessories**Accessories**

For our energy meters, we offer accessories to mount meters, which originally have been designed to be put into front doors, onto DIN rails for example. Similarly, if you lose a mounting clip, you can easily reorder it.

General ordering data

Type ENERGY METER BRACKET L1
Order No. [2433060000](#)
GTIN (EAN) 4050118446388
Qty. 1 pc(s).

Type ENERGY METER SEAL L96-2
Order No. [2495610000](#)
GTIN (EAN) 4050118505931
Qty. 1 pc(s).

Type ENERGY METER FIXING SET
Order No. [2433030000](#)
GTIN (EAN) 4050118446401
Qty. 1 pc(s).