

## ENERGY METER D650

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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 D650
Order No.	<a href="#">2425490000</a>
Version	Supply voltage : 230 V
GTIN (EAN)	4050118433326
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Width	107.5 mm	Width (inches)	4.232 inch
Height	90 mm	Height (inches)	3.543 inch
Depth	82 mm	Depth (inches)	3.228 inch
Net weight	350 g		

**Temperatures**

Humidity at operating temperature	5...95 % RH	Operating temperature, max.	55 °C
Operating temperature, min.	-10 °C	Storage temperature, max.	70 °C
Storage temperature, min.	-20 °C	Operating temperature	-10 °C...55 °C
Storage temperature	-20 °C...70 °C		

**Measuring current input**

Current-measuring channels	4	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1..40.	Measuring accuracy for current	0.25 %
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	RS232: 9.6 – 115.2 kbps, RS485: 9.6 – 921.6 kbps	Protocol	Modbus RTU
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**Inputs/outputs**

Number of digital inputs	2	Number of digital outputs	2
Number of pulse outputs	2	Temperature input	Yes

**Measurement data recording**

Memory; minimum and maximum values	Yes	Memory size	4 MB
Number of memory values	156 k	Update interval register	200 ms
Min. memory recording interval	60 s	Software	ecoExplorer go®
Integrated logic	Yes		

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## Technical data

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Standards	DIN EN 61326-1, DIN EN 61000-4-2, DIN EN 61000-4-3, DIN EN 61000-4-4, DIN EN 61000-4-5, DIN EN 61000-4-6, DIN EN 61000-4-8, EN 61000-4-11, IEC 61010-1, IEC 61010-2-030, EN 55011	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	95 - 240 V AC, 135 - 340 V DC	Supply voltage	230 V
Three-wire system	Yes	Four-wire system	Yes
Quadrants	4	Sampling frequency 50/60 Hz	20 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	0.25 %
Measurement accuracy for active energy (kWh, .../5 A)	Class 0.5S	Operating-hours counter	Yes
Current-measuring channels	4	Clock	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	Yes	Positive, negative and zero system	Yes
Brief interruptions	No	Sequence-of-events recorder function	No

## Classifications

ETIM 5.0	EC001102	ETIM 6.0	EC002301
UNSPSC	39-12-15-35	eClass 6.2	27-20-03-90
eClass 7.1	27-37-18-01	eClass 8.1	27-37-18-01
eClass 9.0	27-14-23-30	eClass 9.1	27-21-03-01

## Approvals

Approvals



ROHS

Conform

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**Technical data****Downloads**

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Approval/Certificate/Document of Conformity	<a href="#">EU-Declaration of Conformity</a>
Software	<a href="#">MODBUS Adressenliste</a> <a href="#">Win64 - ecoExplorer go</a> <a href="#">Unix - ecoExplorer go</a> <a href="#">Win32 - ecoExplorer go</a> <a href="#">Linux64 - ecoExplorer go</a> <a href="#">Linux32 - ecoExplorer go</a>
User Documentation	<a href="#">Quick Guide German/English</a> <a href="#">Manual Energy Meter D650 German/English</a> <a href="#">Manual ECOEXPLORER GO English</a>

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**Drawings**

**Dimensioned drawing**

