

ENERGY ANALYSER D550

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



Increasingly non-linear loads and system components are entering production facilities. They influence the mains frequency, phase shift and the amplitudes of the phases. This has an influence on the quality of the electrical energy and therefore on system availability. Energy analysers, such as the Energy Analyser, measure all quality parameters of the electrical supply network: from the symmetry parameters through to the transients - and many more parameters besides. With the Energy Analyser you comprehensively test the quality of the electrical energy in your production facility and introduce optimisation steps to maximise the effectiveness and availability of your system.

General ordering data

Type	ENERGY ANALYSER D550
Order No.	2425510000
GTIN (EAN)	4050118433487
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	46 mm	Depth (inches)	1.811 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.	-25 °C	Operating temperature	-10 °C...55 °C
Storage temperature	-25 °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, Ethernet, Web server/e-mail	Protocol	Modbus RTU, Modbus-Gateway, Modbus TCP/IP, Modbus RTU over Ethernet, SNMP, BACnet (optional)
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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	128 MB
Number of memory values	5,000 k	Update interval register	200 ms
Min. memory recording interval	60 s	Software	ecoExplorer go®
Integrated logic	Yes		

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Standards	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, DIN EN 61326-1, EN 61000-4-11, EN 55011, 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	95 - 240 V AC, 135 - 340 V DC	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	Weekly time switch	Yes
Current-measuring channels	4	Clock	Yes
Bimetal function	Yes	Peak load optimisation	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	Yes	Sequence-of-events recorder function	Yes

Classifications

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

Approvals

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ROHS

Conform

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	EU-Declaration of Conformity
Software	MODBUS Adressenliste Unix - ecoExplorer go Win32 - ecoExplorer go Linux64 - ecoExplorer go Linux32 - ecoExplorer go
User Documentation	Manual Energy Analyser D550 German/Englisch Quick Guide German/English Manual ECOEXPLORER GO English

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Drawings

