ENERGY ANALYSER D550-24

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

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

Order No.	2489780000
Type	ENERGY ANALYSER D550-24
GTIN (EAN)	4050118499803
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	46 mm	Depth (inches)	1.811 inch
Height	90 mm	Height (inches)	3.543 inch
Width	107.5 mm	Width (inches)	4.232 inch
Net weight	265 g		

Temperatures

Storage temperature	-25 °C...70 °C	Operating temperature	-10 °C...55 °C
Humidity at operating temperature	5...95 % RH		

Measuring current input

Current-measuring channels	4	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1.-40.	Measuring accuracy for current	0.25 %
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)

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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Input frequency	< 20 Hz	Rated current	1 / 5 A
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	20 ... 50 V AC ±10%, 20 ... 70 V DC ±10%	Three-wire system	Yes
Four-wire system	Yes	Quadrants	4
Sampling frequency 50/60 Hz	20 kHz	Continuous measurements	Yes
Measurement result per second	5	Effective value from the period (50/60 Hz)	10 / 12
Residual current measuring	No	Current-measuring channels	4
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	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

Insulation coordination

Surge voltage category	300 V CAT III

Classifications

ETIM 6.0	EC002301	ETIM 7.0	EC002301
ETIM 8.0	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		

Approvals

Approvals	c UL us LISTED
ROHS	Conform
UL File Number Search	E469563

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Downloads

Approval/Certificate/Document of Conformity	CE PAPER.pdf
Engineering Data	STEP
Software	MODBUS Adressenliste Win64 - ecoExplorer go
User Documentation	Manual Energy Analyser D550 German/Englisch Quick Guide German/English Manual ECOEXPLORER GO English
Catalogues	Catalogues in PDF-format

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Drawings

