

ENERGY ANALYSER 550

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

www.weidmueller.com



Energy analysers

More and more non-linear consumers and plant components are finding their way into production facilities. They influence, for example, mains frequency, phase shift and amplitudes of the phases. This has an influence on the quality of the electrical energy and thus on plant availability. The energy analysers measure all quality parameters - from the parameters of symmetry to transients - and many more. After comprehensive testing, optimisation steps can then be initiated to maximise the efficiency and availability of the plants.

General ordering data

Order No.	2425500000
Type	ENERGY ANALYSER 550
GTIN (EAN)	4050118433470
Qty.	1 items

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Technical data

Approvals

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ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E469563

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	144 mm	Height (inches)	5.6693 inch
Width	144 mm	Width (inches)	5.6693 inch
Net weight	1080 g		

Temperatures

Storage temperature	-25 °C...70 °C	Humidity at storage temperature	5...95 % RH
Operating temperature	-10 °C...55 °C	Humidity at operating temperature	5...75 % RH

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Measuring current input

Housing main material	Polycarbonate PC, Metal	Rated current	1 / 5 A
Current-measuring channels	4 + 2	Measuring accuracy for current	0.2 %
Residual current measuring	Yes	Harmonics, per order / current	1.-63.
Distortion factor THD-I in %	Yes	Max. current	5000 A

Measuring voltage input

Low voltage network	3 phase 3 wire (L1 + L2 + L3), 3 phase 4 wire (L1 + L2 + L3 + N)	Measuring accuracy for voltage	0.1 %
Three-wire system	Yes	Quadrants	4
Harmonics, per order / voltage	1.-63.	Distortion factor THD-U in %	Yes
Measurement range, voltage L-L, AC	720 V	Measurement range, voltage L-N, AC	417 V
Four-wire system	Yes		

Communication

Interface	RS485: 9.6 – 921.6 kbps, Profibus DP, 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

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Measurement data recording

Memory; minimum and maximum values	Yes	Memory size	256 MB
Number of memory values	10000 k	Update interval register	200 ms
Min. memory recording interval	1.00 s	Software	ecoExplorer go®
Integrated logic	Yes		

Technical data

Version	Power measurement/ display for 1-, 3-phase mains	Input frequency	<20 Hz
Type of mounting	Frontpanel mounting	Protection degree	IP20, IP40
Rated current	1 / 5 A	Max. current	5000 A
Display monitoring (monitor)	LCD	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, EN 61000-4-11, EN 55011, IEC 61010-1, IEC 61010-2-030, DIN EN 61000-4-8
Measurement range, voltage L-N, AC	417 V	Measurement range, voltage L-L, AC	720 V
Surge voltage category	600 V CAT III	Supply voltage	95 - 240 V AC, 80 - 300 V DC
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 ms
Effective value from the period (50/60 Hz)	10 / 12	Residual current measuring	Yes
Current-measuring channels	4 + 2	Measuring accuracy for voltage	0.1 %
Measuring accuracy for current	0.2 %	Measurement accuracy for active energy Class 0.2S (kWh, .../5 A)	
Operating-hours counter	Yes	Weekly time switch	Yes
Clock	Yes	Bimetal function	Yes

Voltage quality measurement

Harmonics, per order / voltage	1-.63.	Harmonics, per order / current	1-.63.
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	600 V CAT III
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Classifications

ETIM 8.0	EC002301	ETIM 9.0	EC002301
ETIM 10.0	EC002301	ECLASS 14.0	27-14-23-30
ECLASS 15.0	27-14-23-30		

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Drawings

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