

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 pc(s).

ENERGY ANALYSER 550

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	144 mm	Height (inches)	5.669 inch
Width	144 mm	Width (inches)	5.669 inch
Net weight	1,080 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

Measuring current input

Current-measuring channels	4 + 2	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1..63.	Measuring accuracy for current	0.2 %
Rated current	1 / 5 A	Residual current measuring	Yes

Measuring voltage input

Distortion factor THD-U in %	Yes	Four-wire system	Yes
Harmonics, per order / voltage	1..63.	Measurement range, voltage L-L, AC	720 V
Measurement range, voltage L-N, AC	417 V	Measuring accuracy for voltage	0.1 %
Quadrants	4	Three-wire system	Yes

Communication

Interface	Protocol	Modbus RTU, Modbus-Gateway, Modbus TCP/IP, Modbus RTU over Ethernet, SNMP, Profibus DP V0, BACnet (optional)
RS485: 9.6 – 921.6 kbps, Profibus DP, Ethernet, Web server/e-mail		

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	256 MB
Number of memory values	10,000 k	Update interval register	200 ms
Min. memory recording interval	1 s	Software	ecoExplorer go®
Integrated logic	Yes		

ENERGY ANALYSER 550

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Technical data

Input frequency	<20 Hz	Protection degree	IP20, IP40
Rated current	1 / 5 A	Version	Power measurement/display for 1-, 3-phase mains
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	
Measurement range, voltage L-L, AC	720 V	Surge voltage category	417 V 600 V CAT III
Voltage supply	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 (kWh, .../5 A)	Class 0.2S	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
------------------------	---------------

Classifications

ETIM 6.0	EC002301	ETIM 7.0	EC002301
ETIM 8.0	EC002301	ETIM 9.0	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
ECLASS 12.0	27-14-23-30	ECLASS 13.0	27-14-23-30

Approvals

Approvals



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

Creation date May 2, 2024 4:31:49 PM CEST

Catalogue status 20.04.2024 / We reserve the right to make technical changes.

ENERGY ANALYSER 550**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Downloads**Approval/Certificate/Document of Con-
formity[Application notes – Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Software

[Device description – GSD DATA](#)[Device description – MODBUS address list](#)[Win64 - ecoExplorer go](#)

User Documentation

[Quick Guide German/English](#)[Manual Energy Meter 550 German/English](#)[Application notes – Manual ECOEXPLORER GO English](#)

Catalogues

[Catalogues in PDF-format](#)

ENERGY ANALYSER 550

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

www.weidmueller.com

Drawings

