

## ENERGY ANALYSER 750-24

**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.  | <a href="#">2534160000</a> |
| Type       | ENERGY ANALYSER 750-24     |
| GTIN (EAN) | 4050118545821              |
| Qty.       | 1 pc(s).                   |

## ENERGY ANALYSER 750-24

Weidmüller Interface GmbH &amp; 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 | Operating temperature | -10 °C...55 °C |
| Humidity at operating temperature | 5...95 % 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 | 0.1 % |
| 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 | 600 V |
| Measurement range, voltage L-N, AC | 347 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 750-24

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Technical data

|  |         |   |   |
|--|---------|---|---|
| Input frequency                            | <20 Hz  | Rated current   | 1 / 5 A   |
| Version                                    |         | Standards   | DIN EN 61000-4-2,<br>DIN EN 61000-4-3,<br>DIN EN 61000-4-4, DIN<br>EN 61000-4-5, DIN<br>EN 61000-4-6, DIN<br>EN 61000-4-8, DIN EN<br>61238-1, EN 61000-4-11,<br>EN 55011, IEC 61010-1,<br>IEC 61010-2-030 |
| Measurement range, voltage L-N, AC         | 347 V   | Measurement range, voltage L-L, AC                    | 600 V   |
| Surge voltage category                     |         | Voltage supply  | 48...110 V AC, 24...150 V<br>DC   |
| Three-wire system                          | Yes     | Four-wire system                                      | Yes   |
| Quadrants                                  | 4       | Sampling frequency 50/60 Hz                           | 25.6 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             |         | 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    |
| Current flicker intensity      | Yes    | Short/long time flicker              | 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 | 27142330    |

## Approvals

Approvals



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

Creation date December 5, 2023 10:12:03 AM CET

Catalogue status 24.11.2023 / We reserve the right to make technical changes.

3

## ENERGY ANALYSER 750-24

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

[www.weidmueller.com](http://www.weidmueller.com)

## Technical data

### Downloads

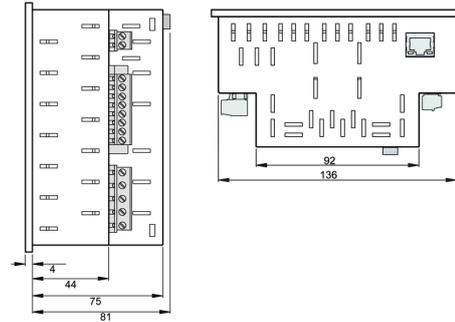
|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Certificate class A</a><br><a href="#">Application notes – Declaration of Conformity</a>  |
| Engineering Data                            | <a href="#">CAD data – STEP</a>   |
| Software                                    | <a href="#">Device description – GSD DATA</a><br><a href="#">Device description – MODBUS address list</a><br><a href="#">Runtime Software – Win64 - ecoExplorer go</a>        |
| User Documentation                          | <a href="#">Quick Guide German/English</a><br><a href="#">Manual Energy Analyser 750 German/Englisch</a><br><a href="#">Application notes – Manual ECOEXPLORER GO English</a> |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |

**ENERGY ANALYSER 750-24**

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

www.weidmueller.com

**Drawings**



## ENERGY ANALYSER 750-24

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

[www.weidmueller.com](http://www.weidmueller.com)

## Accessories

### Accessories



### General ordering data

|            |                            |
|------------|----------------------------|
| Type       | ENERGY METER SEAL L144     |
| Order No.  | <a href="#">2495630000</a> |
| GTIN (EAN) | 4050118505870              |
| Qty.       | 1 pc(s).                   |

|            |                            |
|------------|----------------------------|
| Type       | ENERGY METER BRACKET B1    |
| Order No.  | <a href="#">2433040000</a> |
| GTIN (EAN) | 4050118446364              |
| Qty.       | 1 pc(s).                   |