

**ENERGY METER 700-PN-24**

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

www.weidmueller.com



Advanced functionality of energy data capture  
 The scope of performance of the ValueLine energy meters goes beyond the core functions of energy measurement.  
 They are also suitable for determining, storing and visualising further energy quality parameters.  
 The free "ecoExplorer go" software is available for most types of the product group,  
 on the one hand for device configuration / commissioning / visualisation of the measured values and on the other hand for analysing the power quality.

**General ordering data**

Version	Power measurement/display for 1-, 3-phase mains
Order No.	<a href="#">2500870000</a>
Type	ENERGY METER 700-PN-24
GTIN (EAN)	4050118513929
Qty.	1 items

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## Technical data

## Approvals

Approvals CE; CULUS

Approvals CE

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E469563

## Dimensions and weights

Depth	72 mm	Depth (inches)	2.8346 inch
Height	96 mm	Height (inches)	3.7795 inch
Width	96 mm	Width (inches)	3.7795 inch
Net weight	265 g		

## Temperatures

Storage temperature	-25 °C...70 °C	Humidity at storage temperature	0...90 % RH
Operating temperature	-10 °C...55 °C	Humidity at operating temperature	0 - 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	Plastic	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.-40.
Distortion factor THD-I in %	Yes	Max. current	5000 A

## Measuring voltage input

Low voltage network	3 phase 4 wire (L1 + L2 + L3 + N), 3 phase 3 wire (L1 + L2 + L3)	Measuring accuracy for voltage	0.2 %
Three-wire system	Yes	Quadrants	4
Harmonics, per order / voltage	1.-40.	Distortion factor THD-U in %	Yes
Measurement range, voltage L-L, AC	480 V	Measurement range, voltage L-N, AC	277 V
Four-wire system	Yes		

## Communication

Interface	RS485: 9,6 – 115,2 kbps, Ethernet, Web server	Protocol	PROFINET, Modbus RTU, Modbus TCP/IP, Modbus RTU over Ethernet, SNMP
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## Inputs/outputs

Number of digital inputs	3	Number of digital outputs	5
Analogue inputs (RCM, temperature, analogue)	2	Number of pulse outputs	5

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Temperature input	Yes
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## Measurement data recording

Memory; minimum and maximum values	Yes	Update interval register	200 ms
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	IEC 61010-2-030, IEC 61010-1, IEC 61326-1
Measurement range, voltage L-N, AC	277 V	Measurement range, voltage L-L, AC	480 V
Surge voltage category	300 V CAT III	Supply voltage	24 - 90 V AC (50/60 Hz), 24 - 90 V DC
Supply voltage	24 V	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	0.2 %	Measuring accuracy for current	0.2 %
Measurement accuracy for active energy (kWh, .../5 A)	Class 0.5S	Operating-hours counter	Yes
Weekly time switch	No	Bimetal function	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	No	Positive, negative and zero system	Yes
Brief interruptions	No	Sequence-of-events recorder function	No

## Insulation coordination

Surge voltage category	300 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		

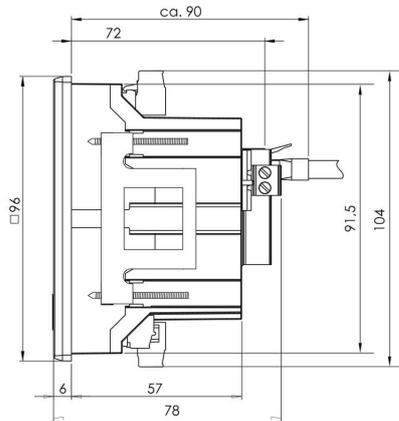
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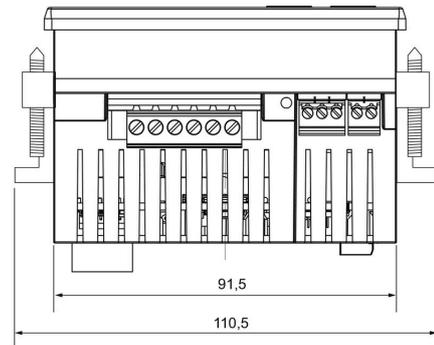
**Drawings**

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

**Dimensioned drawing**



**Dimensioned drawing**



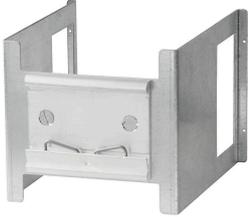
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## Accessories

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

### Accessories



### General ordering data

Type	ENERGY METER BRACKET L1	Version	
Order No.	<a href="#">2433060000</a>		
GTIN (EAN)	4050118446388		
Qty.	1 ST		
Type	ENERGY METER SEAL L96-2	Version	
Order No.	<a href="#">2495610000</a>		
GTIN (EAN)	4050118505931		
Qty.	1 ST		
Type	ENERGY METER FIXING SET	Version	
Order No.	<a href="#">2433030000</a>		
GTIN (EAN)	4050118446401		
Qty.	1 ST		