

COUNTIS E4x

Active energy meters for electrical distribution

three-phase – connect to current transformers up to 12000 A



COUNTIS E44 - MID

Function

The **COUNTIS E4x** is a modular electrical power meter. It shows kWh, kVAh and kVA readings and other measurements on its backlit LCD. These devices are intended for three-phase power metering via CT, they are suitable for applications up to 12000 A.

The **COUNTIS E4x** is fully integrated into the **SOCOMECC** monitoring ecosystem (Webview, screens, gateways, configuration software, etc.). **COUNTIS E42, E44, E46 and E48** are MID-certified.

Advantages

Communication via RS485 (MODBUS), M-Bus, Ethernet or pulse outputs

COUNTIS E4x have either one or two pulse output(s), or one RS485 (MODBUS), M-BUS or Ethernet Modbus TCP communication output.

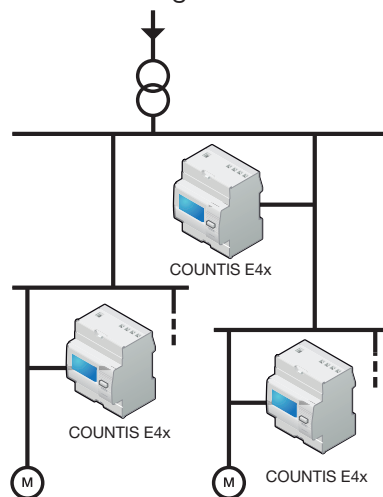
B+D module, MID-certified

COUNTIS E units meet MID standards and ensure accurate and reliable metering (crucial prerequisites of power-billing applications). The "module B+D" certification proves that an external laboratory has verified the design and production process of these devices.

Bi-directional, multi-reading and load-curve metering

In bi-directional mode, the device can measure both consumed and generated energy at the same time. Shows electrical readings (I, U, V, P, Q, S, PF) and the load curve over a 7-day period via the communication methods.

Functional diagram



Socomtec monitoring ecosystem

Inherent compatibility with energy management systems and Socomtec gateways (Webview, screens, gateways, etc.).

Multi-tariff

Allows you to assign energy metering to different time slots (every hour, off-peak hours) or different sources (normal, replacement) to accurately monitor energy consumption.

General characteristics

- Measurement accuracy: 1% / 0.5% (MID).
- Backlit LCD.
- Multiple measurements on-screen.

Models	Specific features
E41	Dual-tariff + pulse output
E42	Dual-tariff + pulse output + MID
E43	4-tariff + pulse output + communication via RS485 MODBUS
E44	4-tariff + pulse output + communication via RS485 MODBUS + MID
E45	4-tariff + pulse output + communication via M-BUS
E46	4-tariff + pulse output + communication via M-BUS + MID
E47	4-tariff + pulse output + Ethernet
E48	4-tariff + pulse output + Ethernet + MID

The solution for

- > Data centre
- > Building
- > Industrial process



Strong points

- > Communication via RS485 (MODBUS), M-Bus, Ethernet or pulse outputs
- > B+D module, MID-certified
- > Bi-directional, multi-reading and load-curve metering
- > Socomtec monitoring ecosystem: user software, remote displays
- > Multi-tariff

MID certification

- > **COUNTIS E** units meet MID standards and provide accurate and reliable metering for power-billing applications.
- > The **COUNTIS E** MID has tamper-proof accessories to prevent fraud.



Compliance with standards

- > IEC 62053-21 Class 1
- > IEC 62053-23 Class 2
- > IEC 62053-31
- > IEC 62053-11
- > EN 50470-1
- > EN 50470-3

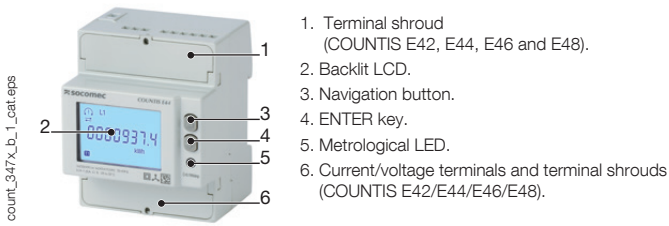


Associated current transformers

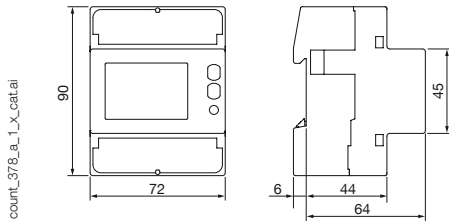


See "Current transformers".

Front panel



Dimensions (mm)



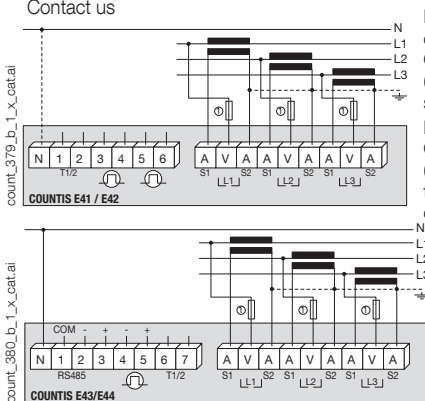
Type	Modular
Number of modules	4
Dimensions W x H x D	72 x 90 x 64 mm
Casing protection degree	IP20
Front panel protection degree	IP51
Display type	Backlit LCD, 8 digits
Cross-section of rigid connecting cable	1.5 to 6 mm ²
Cross-section of flexible connecting cable	1.5 to 6 mm ²
Weight	322 g

Connections

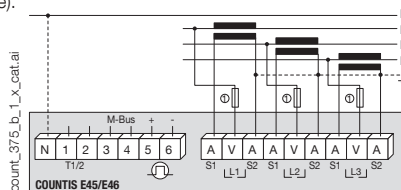
We recommend:

- Connecting CT secondaries is strictly prohibited with IT earthing arrangements; it is, however, optional in TT/TN earthing arrangements.
 - When disconnecting the COUNTIS device, it is essential to short-circuit the secondaries of each current transformer. This operation can be carried out automatically by a PTI, which can be found in the SOCOMEC catalogue.
- Contact us

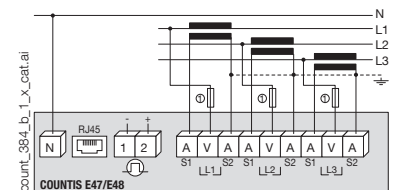
IMPORTANT: Neutral connection is mandatory on COUNTIS E43/E44/E47/E48 (neutral is represented by the solid line in the image opposite). Neutral is optional on COUNTIS E41/E42/E45/E46 (neutral is represented by the dashed line in the image opposite).



1. 0.5 A gG / 0.5 A class CC fuses.



count_375_b_1_x_cat.ai



count_384_b_1_x_cat.ai

References

Type	COUNTIS E41 Reference	COUNTIS E42 Reference	COUNTIS E43 Reference	COUNTIS E44 Reference	COUNTIS E45 Reference	COUNTIS E46 Reference	COUNTIS E47 Reference	COUNTIS E48 Reference
Via CT - Dual-tariff	4850 3063							
Via CT - Dual-tariff + MID		4850 3064						
Via CT - Dual-tariff + MODBUS communication via RS485 ⁽¹⁾			4850 3065					
Via CT - Dual-tariff + MODBUS communication via RS485 + MID ⁽¹⁾				4850 3066				
Via CT - Dual-tariff + communication via M-BUS ⁽¹⁾					4850 3067			
Via CT - Dual-tariff + communication via M-BUS + MID ⁽¹⁾						4850 3068		
Via CT - Dual-tariff + communication via Ethernet Modbus CTP ⁽¹⁾							4850 3056	
Via CT - Dual-tariff + communication via Ethernet Modbus CTP + MID ⁽¹⁾								4850 3057

(1) 4-tariff via RS485 communication.

Accessories	Available for order in multiples of	Reference
Panel mounting kit, 4 modules		192J 8015
10x sealing kits, 4U		4850 309U
Fuse disconnect switches for voltage input protection (RM type) 3-pole	2	5701 0018
gG 10x38 0.5 A fuses	10	6012 0000