COUNTIS E
Active and reactive energy meters and multi-utility pulse concentrators
Energy meters for visible savings

As your first step towards saving energy, energy meters can do so much more than simply provide consumption readings. They now deliver highly accurate measurements along with other electrical parameters essential for managing your energy costs. Use COUNTIS E meters with COUNTIS ECi pulse concentrators and energy management software from Socomec, and you have a complete system that centralises and makes it easier to track your consumption.

Measuring and centralising your energy data

Now offering so much more than metering and measuring functions, COUNTIS E meters, together with COUNTIS ECi pulse concentrators, allow you to centralise your multi-utility data (electricity, water, gas, compressed air, etc.). This means you can easily allocate power by area or by end-use to optimise costs.

Displaying consumption information where it's needed

Simply tracking your energy consumption means you can reduce it significantly. All COUNTIS E units have a backlit display and an optional communication output allowing you to view your consumption remotely or directly on the meter.

Guaranteed measurements

COUNTIS E units comply with the MID directive which guarantee accuracy and reliability when metering, a compulsory function for energy billing applications. These products are subject to quality requirements assuring the accuracy of the displayed measurements and have accessories that prevent any kind of tampering.

Socomec, your best asset

Socomec is a specialist manufacturing group and solution provider in the availability, control and security of low voltage electrical power. A renowned expert in energy efficiency and power quality, Socomec is your single point of contact, from diagnosis to application, for a solution perfectly tailored to your objectives.

With the COUNTIS E, DIRIS A, DIRIS Digware and associated current sensor ranges, Socomec has developed one of the most advanced measurement ranges on the market, dedicated to improving your energy performance.
COUNTIS E

A complete range of energy meters adapted to even the most demanding of applications

COUNTIS E devices are electrical energy meters.
The COUNTIS E range is compatible with every type of integration, network and load (direct readings up to 100 A and up to 6000 A on the CT).

There are multiple features and benefits with this range: MID metering, various communication protocols, multi-measurements and multi-tariff options.

Adapted solutions to reach your energy goals

The COUNTIS E range perfectly meets the needs and constraints of every electrical system: industrial buildings, medical centres, data centres, infrastructures, high rise buildings...
The benefits of the **COUNTIS E** range

**MID metering**
COUNTIS E units comply with the MID directive to guarantee accuracy and reliability when metering, which is compulsory for energy billing applications.
Their tamper-proof components prevent fraud and restrict certain functions (no reset). **The COUNTIS E range is EN50470-compliant and MID-certified as “Module B+D”, guaranteeing that the design and manufacturing process of products are approved by an accredited laboratory.**

**Multiple communication protocols**
COUNTIS E devices incorporate a pulse output or Modbus, M-BUS or Ethernet communication ports. This communication feature allows you to:
- centralise your consumption,
- configure devices remotely via the Easy Config software or web server,
- access up to four tariffs (four time slots) to track your energy consumption in more detail,
- measure more electrical parameters: I, V, P, Q, S and PF.

**Quick setup**
With the Easy Config software you can easily create, edit and save COUNTIS E and COUNTIS ECI settings. It offers the following features:
- set up a new product offline,
- back-up the configuration to your PC,
- transfer the configuration to a device via the communication port.

**Multi-measurement**
Display up to 20 electrical parameters with partial and total energy meters. Partial counters can be started, stopped or reset to get specific and targeted energy consumption readings.

**Multi-tariff**
With multi-tariff readings you can measure your energy at various time slots (peak, non-peak) or read your energy from different sources (normal, backup supply) on a single meter.

**Connection control**
COUNTIS E devices are protected against phase/neutral inversion and can detect wiring errors. Installation and commissioning is quick and the meter is guaranteed to operate correctly.

**Expert Services**
Technical site audits, solution specifications, advice, commissioning, maintenance, training, etc.
Our Expert Services team offers customised support to make your project a success.
Quick setup

Energy and facility managers of commercial and industrial sites, do you want:

• To understand your site, buildings & processes?
• To reduce your energy consumption, costs & carbon emissions?
• To drive a legislation compliance process?
• To monitor, allocate and sub-bill energy costs?
• To implement a corporate green communication?

Socomec’s energy management software is ideal for meeting the energy requirements of industrial and commercial buildings. The software allows you to reduce your energy bills by up to 30%. 

Web server function

Single-point web server

These products have an Ethernet port with an integrated web server accessible on a standard web browser (Internet Explorer, Firefox...).

With the web server function you can:

• monitor electrical units,
• view your energy consumption,
• configure the meter’s main parameters,
• View and export energie values to CSV format (automatic export via FTP).

Multipoint web server

With the DIRIS G gateway used in applications with multiple metering points, you can:

• monitor up to 32 devices (via the web server),
• measure the parameters of your facility in real time (I, V, P, Q, S and PF),
• view the energie values (total and partial metering),
• record measurements and consumption (stored for up to 1 year),
• export consumption data to CSV format (automatic export via FTP).

Also available

Products suitable for existing sites and applications that require the implementation of multiple multimeter circuits.

Software suite: the perfect companion to drive reductions in your energy consumption

Energy and facility managers of commercial and industrial sites, do you want:

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## Selection guide

### Type of network - Input current

<table>
<thead>
<tr>
<th>Type of network - Input current</th>
<th>Single-phase Direct up to 32 A</th>
<th>Single-phase Direct up to 40 A</th>
<th>Single-phase Direct up to 63 A</th>
<th>Single-phase Direct up to 80 A</th>
<th>Three-phase Direct up to 63 A</th>
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### Energy meters: COUNTIS E

- E00 / E02
- E03 / E04
- E05 / E06
- E10 / E11 / E12
- E13 / E14
- E15 / E16
- E17 / E18
- E20 / E21 / E22
- E23 / E24

### Main specifications

- MID: EN 50470 module B+D certification
- RS485 Modbus
- M- Bus
- Ethernet Modbus TCP/RTU
- Width
  - 1 module
  - 1 module
  - 1 module
  - 3 modules
  - 2 modules
  - 2 modules
  - 2 modules
  - 4 modules
  - 4 modules
- Input voltage
  - 230 VAC
  - 230 VAC
  - 230 VAC
  - 230 VAC
  - 230 VAC
  - 230 VAC
  - 230 VAC
  - 230 to 400 VAC
  - 230 to 400 VAC

### Functions

- Total partial energy kWh
- Active power Reactive power
- Dual tariff for kWh
- Total partial energy kwh
- kVA
- Load curve
- Measurement (I, V, P, Q, S and PF)
- CT connection control
- Bi-directional (consumed and generated power)
- Compatible with DIRIS G web server
- Embedded web server

### Accuracy

- Active energy (IEC 62053-21)
- Reactive energy (IEC 62053-23)
- Active energy (EN 50470)

### Characteristics

- Mertological LED
- Pulse output
- Sealing cover (MID version only)
- Phase/neutral inversion protection

### References

- COUNTIS E
- COUNTIS EG2
- COUNTIS EC3

### Pulse concentrator

- Width
- Logical inputs
- Analogue input
- Output (alarm)
- Partial, total, daily, weekly, monthly kWh or other types of data (litres, m³...)
- Load curve from 8 to 30 minutes
- RS485 Modbus

### Easily replaceable components

- MID: EN 50470 module B+D certification
- RS485 Modbus
- M- Bus
- Ethernet Modbus TCP/RTU
- Width
- Input voltage
- Pulse output
- Sealing cover (MID version only)
- Phase/neutral inversion protection

### Selection guide

- COUNTIS E
- COUNTIS EG2
- COUNTIS EC3

### Panel mounting kit

- 192J 8015
- 192J 8015

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- RS485 Modbus
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- Width
- Input voltage
- Pulse output
- Sealing cover (MID version only)
- Phase/neutral inversion protection
## Characteristics

### Accuracy

- **Main specifications**
  - **Pulse output**: 100 Wh
  - **Metrological LED**
  - **Active energy (EN 50470)**: Class B (E02), Class B (E04), Class B (E06), Class B (E12), Class B (E14), Class B (E16), Class B (E18), Class B (E22), Class B (E24)
  - **Reactive energy (IEC 62053-23)**: Class 2
  - **Active energy (IEC 62053-21)**: Class 1
  - **Compatible with DIRIS G web server**
  - **Embedded web server**
  - **Measurement (I, V, P, Q, S and PF)**
  - **Load curve**
  - **Total / partial energy kvarh**
  - **Dual tariff for kWh**
  - **Active power / Reactive power**

- **Input voltage**
  - **230 VAC**

- **Width**
  - **1 module**
  - **3 modules**
  - **2 modules**
  - **4 modules**

- **Ethernet Modbus TCP / RTU**
- **M-Bus**
- **RS485 Modbus**

- **MID: EN 50470 module B+D certification**

### Energy meters:

- **Type of network - Input current**
  - **COUNTIS E 4850**
    - **Single-phase** up to 32 A
    - **Single-phase** up to 40 A
    - **Single-phase** up to 63 A
    - **Three-phase** up to 63 A
    - **Three-phase** up to 80 A

### References and Level of accuracy?

- **Software solution dedicated** and managed by a data can be centralised temperature, wind...)
- **Analogue sensors (light, and electricity meters, or gas, compressed air emanating from water, and store real-time pulses COUNTIS ECi pulse concentrators**
- **New**

### Communication or pulse output?

- **View on the web server?**

### SOCOMEC - COUNTIS E