

# AC and DC energy meters, current sensors and transformers

## *COUNTIS P*



When **energy** matters

# Contribute to the energy transition

while optimising the efficiency of your facilities!

**From design to commissioning, Socomec provides you with its expertise to guarantee high-performance, sustainable electrical installations.**

Today, managing energy consumption is a crucial issue for companies. Reducing the kWh consumed not only reduces costs, but also limits the environmental impact. At the same time, energy metering regulations are becoming stricter, making it essential to use compliant and accurate solutions.

In many sectors of the economy, another major challenge is managing sub-billing. This process makes it possible to accurately rebill the energy consumed by each tenant or business, thus ensuring a fair distribution of costs. Having accurate and compliant meters is therefore essential to avoid errors and ensure full transparency.

COUNTIS P energy meters perfectly meet all these needs. MID-certified, they guarantee reliable accuracy and compliance with regulatory requirements, enabling companies to better monitor and optimise their energy consumption, and to effectively manage sub-billing.



Buildings



Infrastructure



Industry



Charging stations



# COUNTIS P

A range designed to meet all requirements



## Panel builders

Fast, reliable mounting

- Quick and easy wiring thanks to QuickConnect technology.
- Compact design.
- Meters suitable for AC and DC installations.
- Wide coverage by a small number of references.
- Multi-interface: pulse outputs, RS485 (MODBUS RTU) or M-BUS communication.
- Ability to manage up to 4 tariffs via communication.
- Extended operating temperature (-40°C to +70°C).
- MID certification.

## Installers

Quick and easy configuration

- Simplified integration into complex or retrofit environments thanks to a wide range of sensors.
- Compact design.
- Single interface for all meters.
- QuickConnect technology: monitors up to 4 loads with a single meter.
- QuickConnect sensors with 100 mV output, safe even when energised.
- Current direction clearly indicated on the blocks to limit wiring errors.
- Correction of wiring errors directly on the device or via the Easy Config System software.
- 1ph/3ph/3ph+n compatible meter.



## Design offices / End user

Comprehensive solutions to optimise energy management and ensure compliance with standards

- Optimisation of footprint and number of meters on the panel.
- Complete ecosystem: meters, current transformers, sensors and software.
- MID certification.
- High-quality current transformers (CTs) and sensors made in Europe.
- Data integration: Plug & play software to configure and view data.
- Remote data viewing and supervision via web interface: Webview.

# Optimise your electrical cabinet

with a complete ecosystem!

## RGW sensors

- **Versatility:** only 6 references to manage all loads from 5 to 7200 A.
- **Simplified installation:** Rogowski sensors without integrator, for quick and efficient implementation.
- **Compatibility:** ideal for existing installations with complex integration constraints and high currents.

## QCT-C-xx current transformers

- **Versatility:** only 4 references to measure all loads up to 1000 A.
- **Quick mounting:** Sensors can be mounted in either direction.
- **Quick connection** via RJ12 cable for easy, error-free connection.
- **Plug & Play:** no short circuit needed, works even under load.

## Mounting

In-line mounting



DIN rail mounting  
QCT-C-45/QCT-C-55



Cable mounting



Back-plate mounting



Bar mounting



## Embedded software for power monitoring and management

### WEBVIEW

- Automatic detection of devices
- Analysis of consumption by geographical area, use and period



## Communication gateway

### DIRIS Digiware D

- **Simplified configuration:** the gateway's built-in automatic detection ensures fast meter configuration.

## COUNTIS P meters

- **QuickConnect technology:** monitors up to 4 loads with the same meter, making wiring easier and faster.
- **Extended temperature range:** operates from -40 à +70°C.
- **Compatibility** with **WEBVIEW** software for effective management.
- **Quick configuration:** thanks to automatic detection, accessible via communication gateways.
- **Multiple pulse outputs:** to transmit consumption data in the form of pulses and ensure accurate monitoring of consumption.
- **Remote communication:** RS485 (MODBUS RTU) or M-BUS output for complete data monitoring via protocol.
- **Advanced rate management:** up to 4 tariffs for accurate rate analysis.

# Selection guide

Active energy meters							
	COUNTIS P04/P06			COUNTIS E18		COUNTIS P14	COUNTIS E28
TYPE	AC - SINGLE-PHASE						AC - THR
REFERENCES	P04 4850 5004	P06 4850 5006	E18 4850 3048	P14 4850 5014	E28 4850 3055		
KEY CHARACTERISTICS							
Connection mode	Single-phase - direct 45 A		Single-phase - direct 80 A		Single-phase - direct 100 A		Three-phase - direct 80 A
Max. number of loads measured	1		1		1		1
MID Certification, module B + D (EN 50470)	•		•		•		•
Width (number of DIN modules)	1		2		2		4
Auxiliary power supply	Self-powered		Self-powered		Self-powered		Self-powered
Input voltage	230 VAC		230 VAC		230 VAC		230...400 VAC
Type of current input			Direct				Direct
Number of pulse outputs	2		0		2		1
COMMUNICATION							
RS485 Modbus RTU	•/-		-		•		-
M-Bus	-/•		-		-		-
Modbus TCP Ethernet with built-in web server	-		•		-		•
FUNCTIONS							
Total/partial bidirectional energy (kWh, kvarh, kVAh)	•		•		•		•
Instantaneous measurements (I, V, P, Q, S, F and PF)	•		•		•		•
Dual-tariff digital input	-		-		•		-
Maximum number of tariffs managed	4		4		4		4
Compatibility with WEBVIEW software	•/-		•		•		•
ACCURACY							
Active energy (IEC 62053-21)	Class 1		Class 1		Class 1		Class 1
Reactive energy (IEC 62053-23)	Class 2		Class 2		Class 2		Class 2
Active energy (EN 50470-1/3)	Class B		Class B		Class B		Class B

Current sensors and transformers				
	Three-phase current transformers	Flexible Rogowski sensors	Current transformers	Shunts
Models	QCT-C-xx	RGW	TCx	Shunts
Current type	AC	AC	AC	DC
Type of product	Solid-core	Split-core and flexible	Solid- and split-core	Wiring in series
Meter compatibility	COUNTIS P44-xQCT	COUNTIS P44-RGW	COUNTIS P44/P46/E48	COUNTIS P43-DC
Connection mode	Via Quick Connect RJ12 cable	On 2-wire terminal block	On 2-wire terminal block	Via screws on the shunt
Max. current	Up to 1000 A	Up to 6000 A	Up to 10 000 A	Up to 4000 A
Secondary-side output signal	100 mV	100 mV	1 A / 5 A	100 mV



EE-PHASE		AC - THREE-PHASE						DC
<i>P34</i> 4850 5034	<i>P36</i> 4850 5036	<i>E48</i> 4850 3057	<i>P44-2QCT</i> 4850 5244	<i>P44-4QCT</i> 4850 5444	<i>P44-RGW</i> 4850 5144	<i>P44</i> 4850 5044	<i>P46</i> 4850 5046	<i>P43-DC</i> 4850 6000

Three-phase - direct 100 A	Three-phase - via CT 1/5 A	Three-phase via three-phase Quick-Connect CT blocks	Three-phase - via Rogowski coils	Three-phase - via CT 1/5 A	Via shunts up to 4000 A
1	1	2 (-2QCT), 4 (-4QCT)	1	1	1
•	•	•	•	•	-
4	4	4	4	4	2
Self-powered	Self-powered	85-276 VAC 120-240 VDC	85-276 VAC 120-240 VDC	85-276 VAC 120-240 VDC	9-60 VDC
230...400 VAC	230...400 VAC	230...400 VAC	230...400 VAC	230...400 VAC	1000 VDC
Direct	1 A / 5 A	3ph QCT-C CT blocks	RGW Rogowski coils	1 A / 5 A	100 mV shunts
2	1	0	2	2	1

•/-	-	•	•	•/-	•
-/•	-	-	-	-/•	-
-	•	-	-	-	-

•	•	•	•	•	•
•	•	•	•	•	•
•	-	-	•	•	-
4	4	4	4	4	4
•/-	•	•	•	•/-	•

Class 1	Class 0.5s	Class 1	Class 1	Class 0.5s	Class 1 (IEC 62053-41)
Class 2	Class 2	Class 2	Class 2	Class 2	-
Class B	Class C	Class B	Class B	Class C	-

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## A worldwide presence

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