

CEM

Multifunction electrical energy meters
for DIN rail assembly



Much more than an energy meter

CEM series



CEM C10



CEM C20



CEM C30



CEM M

Accurate





Accurate

- » Accuracy in Active Energy
MID: Class B (**EN 50470**)
- » Accuracy in Active Energy:
Class 1.0 (**IEC 62053-21**)
- » Accuracy in Reactive Energy:
Class 2.0 (**IEC 62053-23**)



Accurate

Versatile



Accurate

Versatile

- » Lateral expansion bus, **OSC System**
- » RS-485 Modbus/RTU communication module
- » Expandable with new communication modules
- » Digital impulse output included as standard



Accurate

Versatile

Safe



Accurate

Versatile

Safe

- » Fully sealable unit
(buttons and terminals)
- » Suitable for legal billing
systems (**MID**)



Accurate

Versatile

Safe

Multifunction



Accurate

Versatile

Safe

Multifunction

- » Measurement of kg of CO₂ consumed and consumption in economic terms (€, \$, INR, etc.)
- » Measurement of electrical parameters
V, A, kW, kvar, cosφ, Hz
- » 4-quadrant measurement



Accurate

Versatile

Safe

Multifunction

Competitive



Accurate

Versatile

Safe

Multifunction

Competitive

- » Best value for money
- » Adaptable to measurement circuits and applications.



CEM



Electrical parameter measurement
 V , A , kW , $kW \cdot h$, $kvar$, $\cos \varphi$



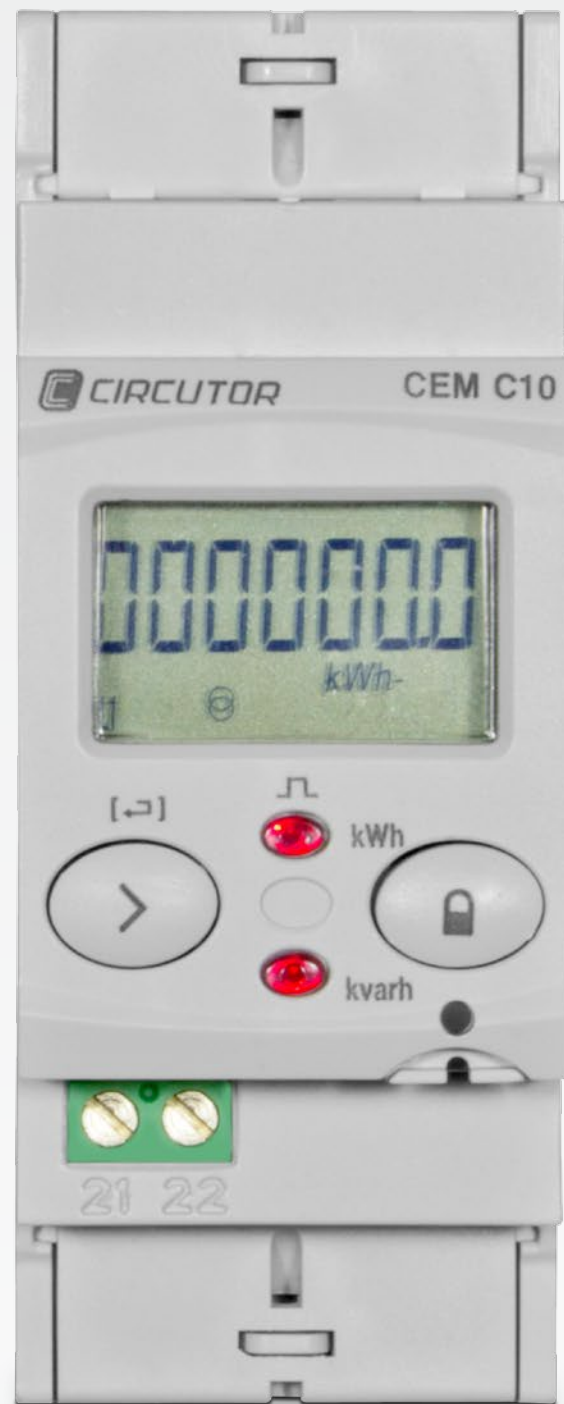
Quick screen display



Measurement in 2 or 4 quadrants



Impulse output



More advantages



MID Certification

Class B / 1 (EN 50470 / IEC 62053-21)



2 Tariffs

Fully configurable tariffs



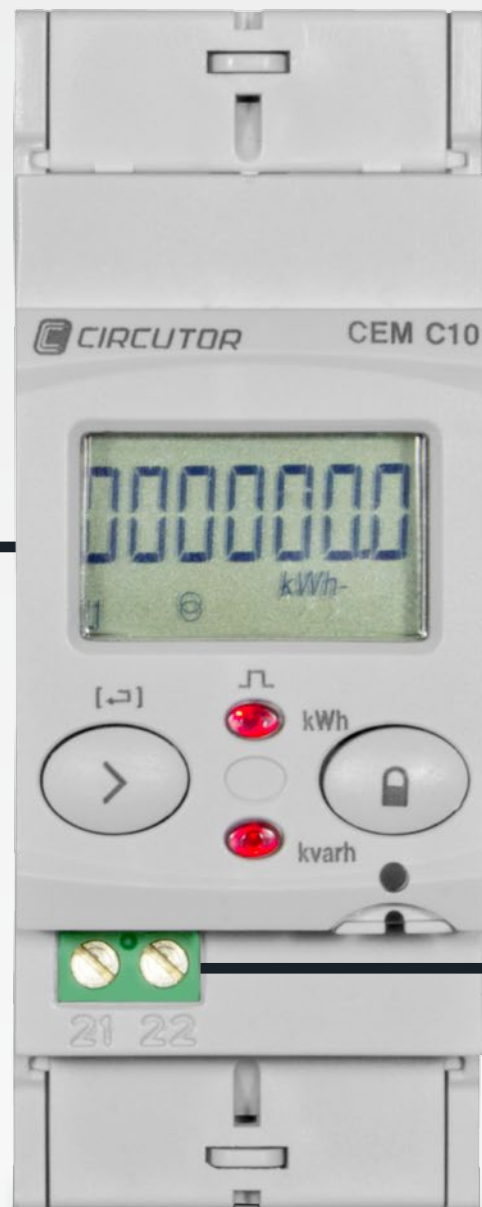
OSC Optical Communications

Lateral optical communications port

VERSATILE

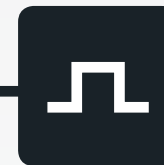
OSC system

Expansion system via an optical bus for attaching an additional communication module



1 impulse output

Impulse output for centralising different consumptions.

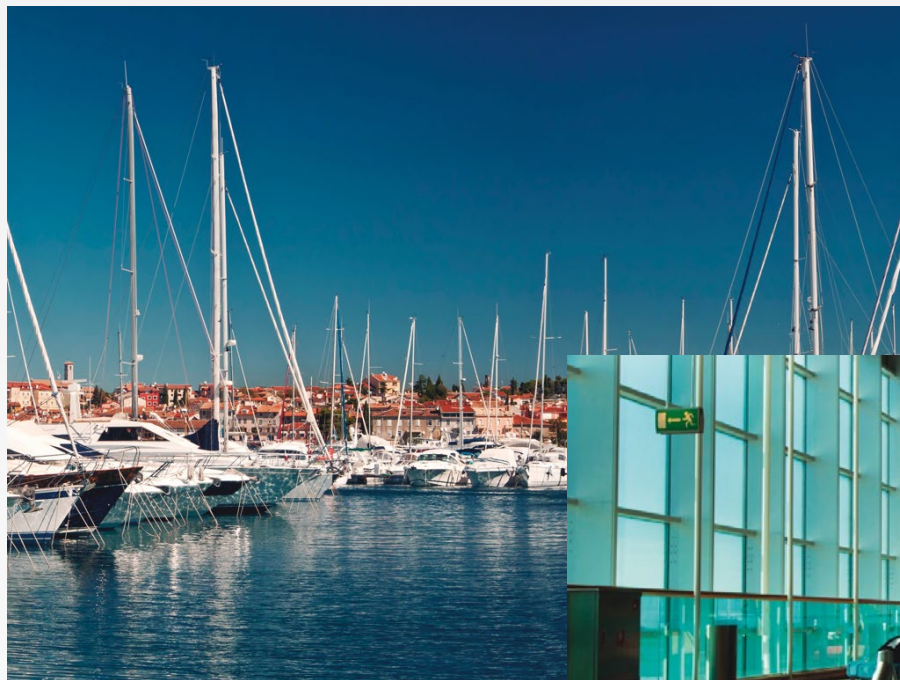


Endless Number of Applications

- » Control and allocation of energy costs
- » Monitoring demand by user
- » Display of economic costs



Shopping centres



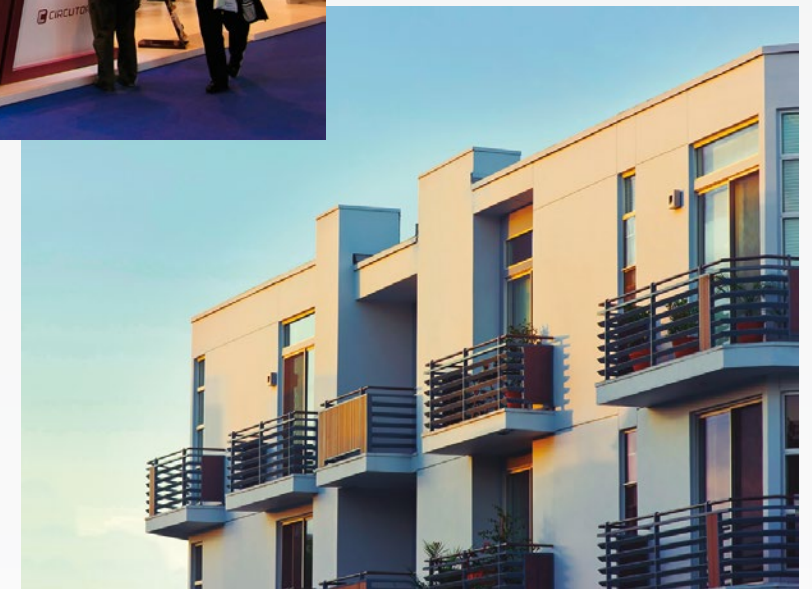
Marinas



Trade fairs and exhibitions



Airports and large infrastructures

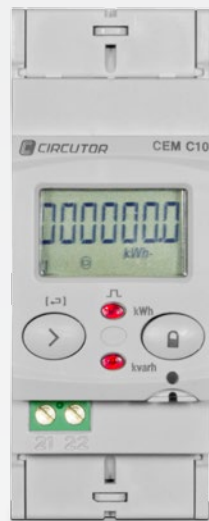


Apartments and homes

Other features

- ABS + V0 self-extinguishing polycarbonate enclosure
- Compact enclosure to be assembled on 2~4 DIN rail modules, 61 mm deep.
- IP 51 protection on the front panel
IP 40 on the terminals
- Backlit LCD
- 1 Octocoupled impulse output
max. 24 Vdc / 50 mA
- Rated voltage
230 Vac / 127 Vac $\pm 20\%$
- Frequency
50...60 Hz
- Consumption
< 2 W / 10 VA
- Active Energy Accuracy = Class B (**EN 50470**)
Class 1 (**IEC 62053-21**)
- Reactive Energy Accuracy = Class 2.0 (**IEC 62053-23**)
- Regulations
EN 50470-1, EN 50470-3, IEC 62052-11, IEC 62053-21, IEC 62053-23

New range of electrical energy meters



2 modules

CEM-C10

Direct single-phase
energy meter,
assembly on DIN rails



4 modules

CEM-C20

Direct three-phase
energy meter,
assembly on DIN rails



4 modules

CEM-C30

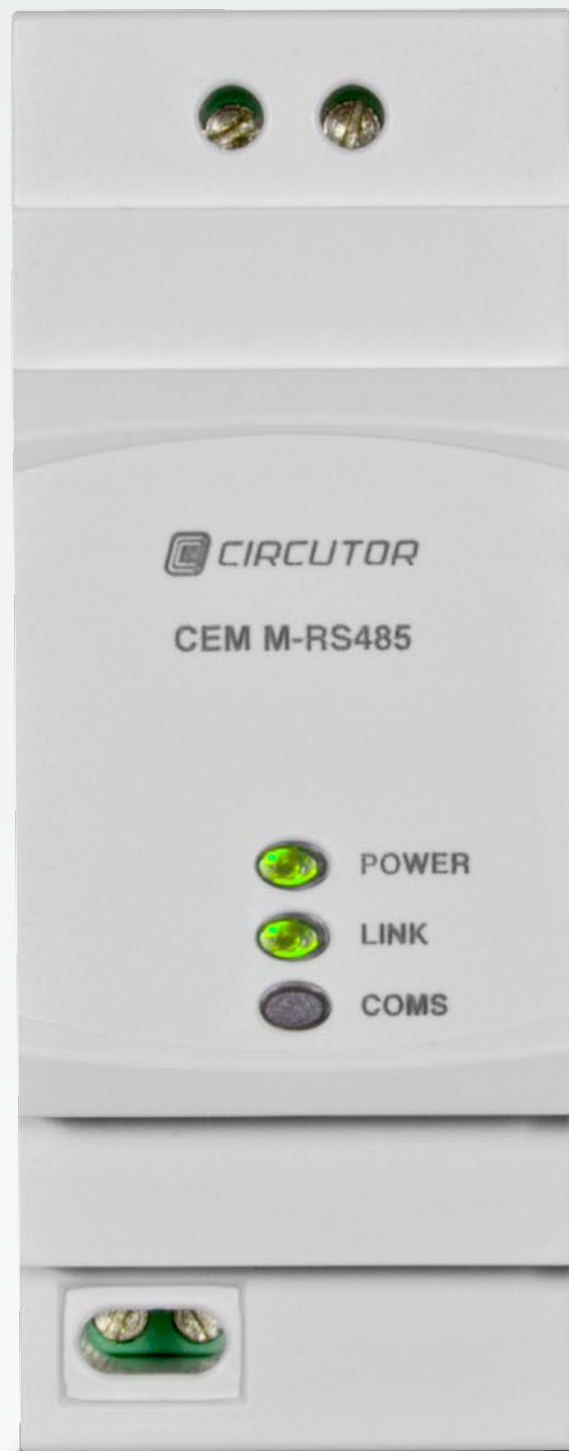
Indirect three-phase
energy meter,
assembly on DIN rails



2 modules

CEM-M

Communication
module for CEM
energy meters



CEM-M



Vast number of protocols
Modbus/RTU, Modbus/TCP
(Coming soon: BACnet, LonWorks, Profibus, etc.)



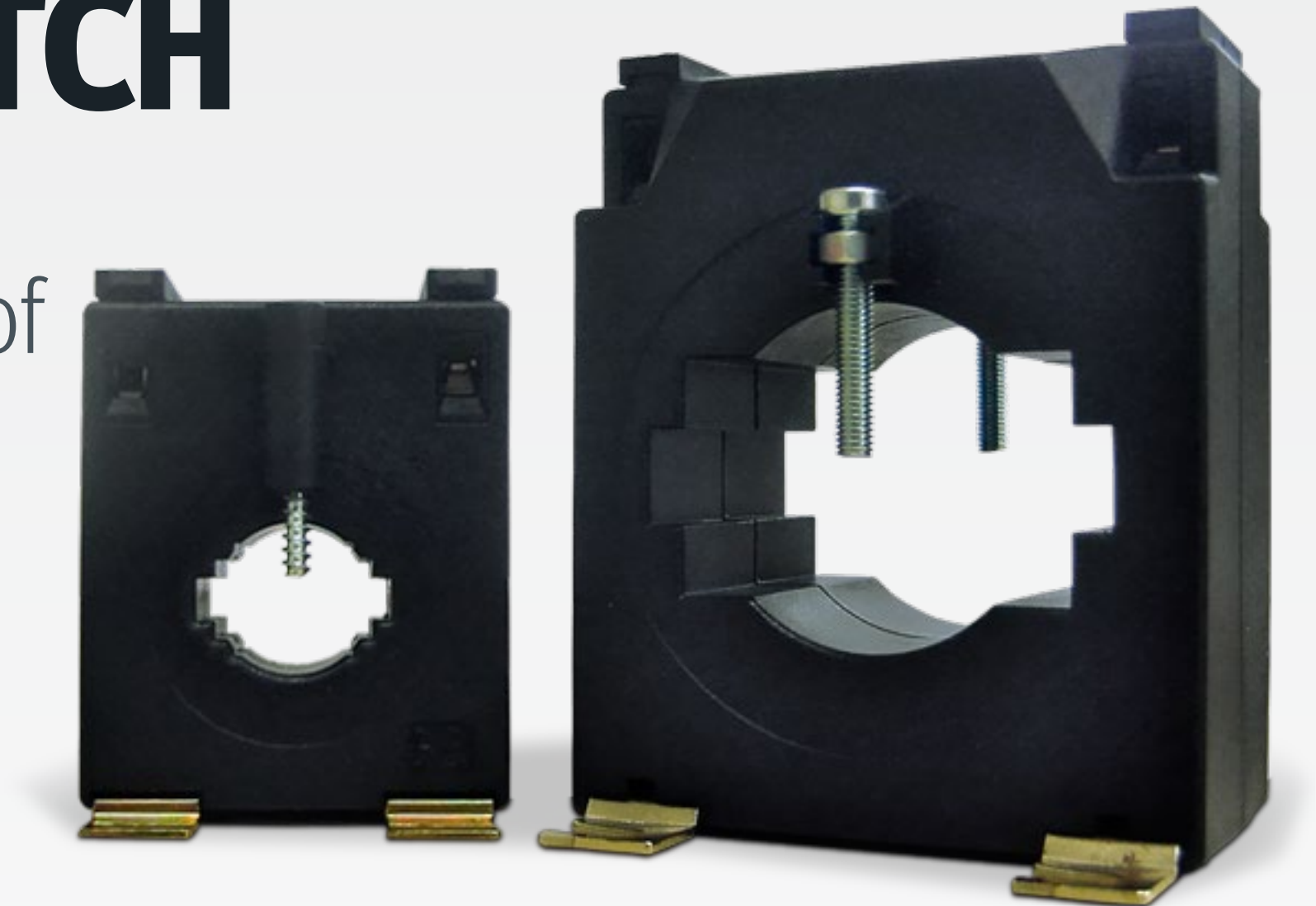
Exchangeable modules
By changing a module we change the protocol.



Compact size
only 2 DIN rail modules

CT / TP / TCH

Extensive range of
measurement
transformer





Energy efficiency technology



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