



econ sens3 -

energy and Power meter

Small, but incredibly powerful! The econ sens3 enables transparency of energy data in the blink of an eye. It ideally suits for the entry into operational energy management and therefore also the preparation of an energy audit according to DIN EN 16247-1 or the certification of an energy management system according to ISO 50001.

The hardware is installed in only a few minutes -completely uninterrupted. Rogowski coils or split core current transformers, which are extremely flexible in their application, are used for current measurement. This makes installations in existing systems and distributions possible without any problems.

Ein Produkt für:

- All companies that want more transparency about energy data and want to enter operational energy management.
- Industrial companies, commercial enterprises, trading houses and municipal facilities (e. g. hospitals)



sens3-

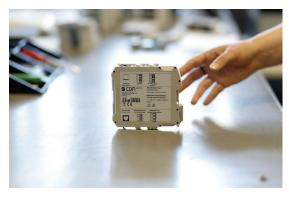
a compact all-rounder

It only takes a few simple steps to display and record the most important electrical parameters. This works for 2, 3 and 4 conductor systems of any load. Rogowski coils or split core current transformers are used to measure the current.

The voltage support is supplied via an AC voltage path or alternatively via 24 VDC. As soon as the econ sens3 is supplied with voltage, the device starts recording measurement data.

Various interfaces realize the best possible integration of the econ sens3, also in existing systems.





Either the ethernet connection or alternatively a node (e. g. hub, switch) enables direct connection to a computer. Measured values can also be retrieved via Modbus TCP. Furthermore, communication via Modbus RTU enables the interconnection of up to 32 participants.

The econ sens3 provides even more features with just two upgrade options:

- A network analysis function according to EN50160 (PRO-Upgrade)
- A data logger function for 4 additional analog or digital signals (LOG-Upgrade)
 Of course, both options can also be combined on one device.

Technical information



- Measurement of power, energy and other electrical values using the indirect measurement method
- o Installation possible without interruption
- o Drei Strom-Messbereiche zur Auswahl:
 - Rogowski coil (200mm): from 3A to 400A
 - Rogowski coil (400mm): from 3A to 3000A
 - Split core current transformer. form 1A to 125A
- Automatic detection of Rogowksi coils and split core current transformers
- The econ sens3 can be used in two-, three- and four-wire TN, TT and IT networks
- Power supply optionally either via 230 V AC voltage path or 24 V DC
- Various interfaces to choose from: Impulses, analog signals, ModbusTCP, ModbusRTU, API as well as web interfaces and a direct connection to econ4
- o Dimensions: 22,5 x 99,0 x 114,5 mm (W x H x D)



Integrated sens3 software for fast and easy data analysis

The integrated econ sens3 software enables an uncomplicated analysis and evaluation of measurement data via a web interface. The connection via ethernet cable and the devices IP address are enough to access all the measurement data – without the need for additional soft-ware. The values of the measured variables are stored in the internal memory in different time resolutions from one second to daily, weekly and monthly values.



Analysis and evaluation:

- Graphical and tabular display of the measured values
- Display of various values for electrical power and energy as well as currents and voltages
- o Instantaneous value display and historical data tables

Export of measured values:

- Export of stored measured values in CSV format
- Simple preparation and further processing
- Manual import of the measured values into the econ 4 software

Direct integration into econ 4 energy management software:

- The integration into econ 4 is possible at any time (via network and IP address)
- Fully automatic data transfer into econ4
- No further hardware required

Incidents (with optional PRO-upgrade):

- Monitoring and analysis of the power quality according to EN50160
- Storage of the different events (e. g. voltage interruption, flicker)
- Detailed graphical analysis of the events in millisecond range
- Detecting disturbances in time to initiate countermeasures

Data logger (with optional LOG-upgrade):

- Four additional interfaces can be configured as digital/analog inputs or outputs
- The usage as inputs enables the connection of further meters (electricity, water, gas, ...) for the following evaluation via the integrated econ sens3 software
- Flexible data logger for different media



Versions and accessories

econ sens3 incl. Rogowksi coils

energy and power meter using Rogowski coils to measure current up to 400 A / 3000 A

econ sens3 incl. 400 A coil set (200 mm)

item number: EC236703

econ sens3 incl. 3000 A coil set (400 mm)

item number: EC236704



econ sens3 incl. folding current transformers

energy and power meter using folding current transformers. Especially suitable for smaller currents up to 125 A.

econ sens 3 incl. 125 A folding current

transformer set

item number: EC 250868



accessories and extensions

accessories:

econ sens3 extension set

for current meausurement

3m - item number EC227588

6m - item number EC226026



Extensions:

PRO-Upgrade

Network analysis function

Item number EC_PRO_UPGRADE

LOG-Upgrade

Data logger function for 4 additional inputs

Item number EC_LOG_UPGRADE



