Energy efficiency in action
Our approach

Developing high-performance, profitable energy-saving strategies

The global E.online® solution products, software and services:

- measurement and monitoring,
- periodic automatic remote meter-reading,
- analysis,
- distribution of multi-utility energy consumption data.

Supervision

E.online®

Energy management and supervision software

E.online® is specialized software which processes and analyses all the energy consumption and electrical data concerning an installation by means of the products associated with it (meters, power monitors, etc.).

It can be used to manage multiple energy types, multiple sites and multiple users via a web browser.

Metering

The meters in the ULYS and MEMO ranges are all equipped with a pulse output measuring the active and reactive energy (Ulys, ETAR).

When connected to a CCT remote-readable pulse receiver and used with the E.online® energy management software, they allow the consumption data to be recovered automatically and remotely.

Communicating system

Ethernet, STN, Series and RF links

Memo 3

Modular meters

CCT

Remote-readable pulse receiver

The CCT is a metering pulse receiver which calculates the load curves and stores the consumption data from the various energy meters (electricity, water, gas, steam, etc.) equipped with pulse output in real time.
The E.online® software contributes actively and effectively to the success of an energy cost reduction and optimization policy. It is part of a global approach based on respect for the environment and economic profitability.

E.online® is an essential tool when implementing a Measurement and Verification Plan in order to identify the potential savings while controlling and optimizing consumption.

Designed using innovative high-performance technologies which are reliable and upgradable, E.online® comprises:
- a remote meter-reading engine,
- an application server,
- a WEB server,
- and a database.

Manage several thousand metering points (multiple energy types and multiple sites).

Warn of any metering anomalies by e-mail.

Access the information instantly via a WEB browser, with secure user profiles.

Monitor the sensitive electrical quantities (real-time measurements, measurement campaigns, etc.).

Distribute information (reports, analyses, alerts, etc.) automatically by e-mail on a regular basis.

Garantee the accuracy of the results displayed by automatically detecting missing or incomplete data.

Calculate the financial impact by evaluating the energy costs.

Analyse, Allocate, Map, Compare and Identify non-standard consumption by means of the numerous reports and analyses provided.

E.online® is available in 3 versions: 2 single-workstation versions (Energy and Premium) and 1 multi-workstation server version (Premium Server).
Where? When? How? How much?

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Your network...

- RF link
  - RF Modem
    - RS485 Ethernet

- Optical fibre link
  - RS485/RS432 serial link
    - RS485/RS432 converter
  - 5-port Ethernet switch
  - RS485 JBUS/Ethernet gateway

- STN link
  - Modem
    - RTC / RS232
    - RTC / RS485
  - Point-to-point RS485 / OF converters
  - Multi-point RS485 / OF converters

- Ethernet link
  - ADSL or ADSL +2 modem/router

... linked to our equipment

- Gas, water or other meter
- CCT
- Ulys
- Enerium

RF link
- RF Modem
  - RS485 Ethernet

Optical fibre link
- RS485/RS432 serial link
  - RS485/RS432 converter
  - 5-port Ethernet switch
  - RS485 JBUS/Ethernet gateway

STN link
- Modem
  - RTC / RS232
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  - Point-to-point RS485 / OF converters
  - Multi-point RS485 / OF converters

Ethernet link
- ADSL or ADSL +2 modem/router
Our equipment

**TCR - TCRO - JVS**
Closed current transformers • Current transformers with opening coil

TCR:
- Designed for easy insertion on existing installations without dismantling cables or bars.
- Full range from 5 to 5,000 A
- Class 0.5/1

TCRO:
- Designed for easy insertion on existing installations without dismantling cables or bars.
- Full range from 5 to 5,000 A
- Class 0.5/1
- Mounting on DIN rail, plate mounting or bar clamp fitting
- Complies with the EN 60044 standard

JVS:
- Designed for high-accuracy headend applications.
- Full range from 100 to 5,000 A
- Class 0.2 S

**PRTC**
Protection for current transformer

For protecting people and equipment against overvoltages due to accidental opening of the secondary circuit on a low-voltage current transformer.

- Automatically short-circuits the secondary to which it is connected
- Measurement current: 1 A or 5 A (25 A max.)
- 2 connection terminals (6 mm²)
- DIN-rail or plate mounting
- Complies with NFC 15100 art. 411-1

**CCT**
Pulse receiver

- Used with the E.online® energy management software, the CCT automatically recovers all the multi-energy consumption data remotely and generates the load curves on the basis of the meter pulses.
- 8 pulse or on-off input channels
- 28 days’ storage at 10-minute intervals
- Management of multi-energy meters (kWh, kVARh, litres, m³, etc)
- 1 RS485 JBus digital output
- Sealable terminal cover
- Mounting on DIN rail

References:
- TCR 10, TCR 11, TCR 15, ..., TCR 90, TCR 100
- TCRO 2030, TCRO 5080, ..., TCRO 80160
- JVS
- PRTC 1001
- CCT1001

Reference:
- CCCT1001
Memo 3
Energy meters for single-phase networks

Compact single-phase meter particularly suitable for applications in the tertiary sector: marinas, rented accommodation, outdoor accommodation, etc.

- Compact: 1 DIN-rail module
- Max. permanent current: 36 A
- Pulse output (10 Wh and 240 ms)
- Class 1 according to IEC 62053-21
- Sealable on phase/neutral terminals
- Mounting on DIN rail

Reference:
36 A direct single-phase

Ulys
Energy meters for MV/LV single/three-phase networks

Single and three-phase meters particularly suitable for industrial and tertiary applications.

- Comprehensive range of 6 meters
- Direct connection 90 A max.
or connection on 1 A or 5 A current transformer
- Sealable terminal cover

References:
90 A direct single-phase: CEMD1001A
90 A direct three-phase: CETD1001
Uninsulated three-phase on CT: CETS1001A
Insulated three-phase on CT: CETI1001A
Dual-tariff insulated three-phase: CEDT1001A
Active/reactive insulated three-phase: CEAR1001A

Power reserve: display and configuration power off
Programmable pulse output (weight and width)
Class 1 according to IEC 62053-21
Mounting on DIN rail

Enerium
Power monitors

- Measurement of more than 400 electrical quantities
- Storage of consumption profiles
- Trend curve function
- 1 RS485 JBus digital output or 1 Ethernet output

Connection to 1 A or 5 A current transformer / 552 Vac max. (permanent ph-ph)
Energy measurements on all 4 quadrants as per IEC 62053-22 and IEC 62053-23
Graphic display of Fresnel diagram and harmonics (Enerium 150)
Up to 8 inputs/outputs (on-off, pulse, analogue, alarm, metering)

The Enerium power monitors contribute to the active supervision of network quality and electrical installation sizing, as well as to energy consumption monitoring and optimization.

References:
96 x 96 cm format: Enerium 50, Enerium 150
144 x 144 cm format: Enerium 100, Enerium 200, Enerium 110, Enerium 210

All the details of the products on this double-page spread can be found in the Enerdis® general catalogue.
Reducing energy costs

Each element in the measurement line complies with the most demanding standards to ensure optimum accuracy.

Measurement

Enerium power monitors can be used to measure, monitor and record all the electrical quantities characterizing a three-phase network.

Associated products

Transformers

TCR-TCRO-JVS

Current transformers

For connecting low-voltage measurement instruments (meters, power monitors, etc.) and isolating them from the electrical network. They deliver to their secondary a current (1 A or 5 A) proportional to the primary current.
Our services

At a time when energy savings are a major concern, ENERDIS is positioned as a provider of energy efficiency solutions. Improving and reducing consumption inevitably involves diagnosis of the installations. It is based on exhaustive measurement of all the parameters required to detect potential savings and propose initial orientations for improvement.

ENERDIS, specialists serving performance measurement

Advice and recommendations concerning site instrumentation and the architecture of the data-gathering system:
- metering equipment and accuracy of the measurement line adapted to the requirements,
- communication network typology and accessories,
- computer equipment,
- adaptation of the software to the customer’s specific features and integration in an existing system,
- assistance with commissioning,
- user training,
- system maintenance contract.

At a time when energy savings are a major concern, ENERDIS is positioned as a provider of energy efficiency solutions. Improving and reducing consumption inevitably involves diagnosis of the installations. It is based on exhaustive measurement of all the parameters required to detect potential savings and propose initial orientations for improvement.

ENERDIS helps you to build your investment plan and assess the return on your investment, so that you can define and measure the objectives in terms of savings and propose suitable solutions for implementation. Measurement is therefore the basis for the diagnosis, control and improvement plan, guaranteeing long-term energy efficiency.

Thinking of setting up a project to control and reduce your energy costs?
Where, when, how and how much? Do you know the details of your energy consumption?

Hoping to allocate your consumption fairly and manage your energy spending?

Seeking a remote metering and automatic management solution covering all your meters?

Looking to identify non-standard consumption and deviations easily?

Searching for a global management system for your utilities (water, gas, electricity, steam, etc.)?

Intending to measure the efficiency of your energy-saving initiatives and improve them?

Need to receive technical and accounting reports on your consumption automatically?

Looking for a global « turnkey » solution to control and monitor your consumption?

Searching for an easy-to-use, affordable tool to monitor and control your consumption?

Seeking to inform your staff about energy spending and raise their awareness or empower them?

Determined to find an upgradable solution which remains completely under your control?

E.online® helps you to find positive responses to all these issues.

Your Distributor

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Specifications must be confirmed before ordering. Photos: Chauvin Arnoux Group. Specifications must be confirmed before ordering. ATHOME