

ELECTRICITY GENERATION, TRANSMISSION AND DISTRIBUTION



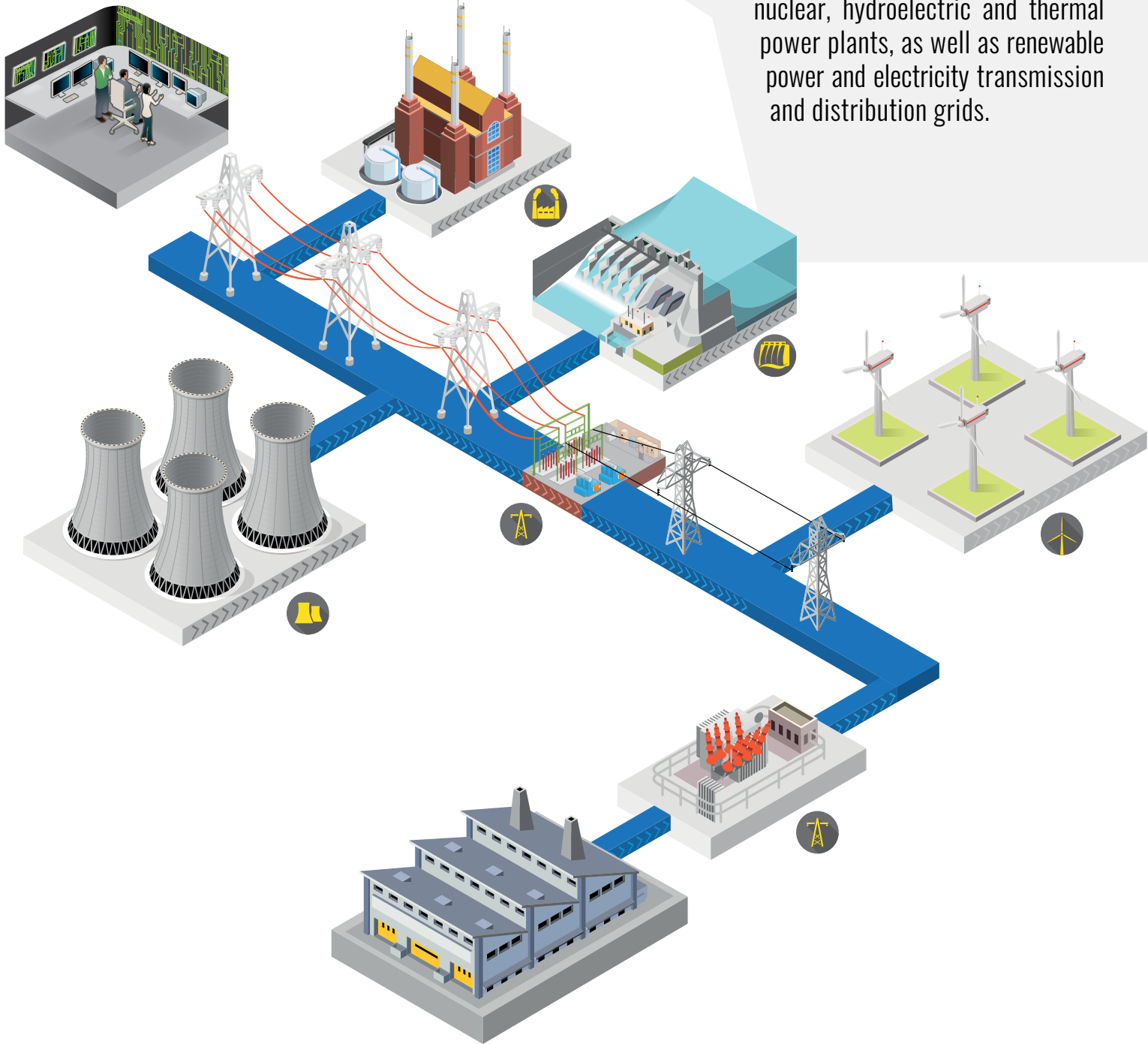
***Our solutions
for metering,
measurement and
analysis***



Generation and power grids

Our areas of expertise

Enerdis provides its know-how and proven solutions to all the players in nuclear, hydroelectric and thermal power plants, as well as renewable power and electricity transmission and distribution grids.



HV substations
MV substations



Thermal
power plants



Wind farms



Hydroelectric
power plants



Nuclear
power plants

Measurement transducers



TRIAD2 range particularly well suited to remote measurement applications for power grid supervision and centralization of the electrical parameters of alternators in power plants.

This range has been adopted by the major players in the sector thanks to:

- More than 50 totally parameterizable connection diagrams
- Accuracy class of up to 0.1
- Easy integration in communication networks using the IEC 61850 standard, which is DNV/GL-certified



T82N range designed specifically for nuclear applications using 100%-analog technology.

C.A 3420 universal model for critical temperature measurements on the turbines and alternators, as well as checking of the positions of the on-load tap changers for the transformers.

- More than 20 different input signals which can be fully parameterized
- Installation in a safety application thanks to SIL2

Power monitors



ENERIUM range designed to monitor power grids in the HV / MV substations.

The extensive functions and high performance offered make this range particularly versatile.

- Accuracy class up to 0.2S for very accurate measurements facilitating substation monitoring
- Analysis of energy quality as per the EN50160 standard
- Management of the logical and analog signals, particularly appreciated by users.
- One of the largest screens on the market for clearly visible operator information
- Simplified integration of ENERIUM power monitors in an automated energy management system thanks to compatibility with the IEC 61850 standard, which is DNV/GL-certified



Power quality analyzers



EQUAL PREMIUM SERVER is a turnkey solution for thorough assessment of the strengths and weaknesses of power transmission and distribution grids.

- Detailed comparison of the changes in all the power quality parameters between each point of connection
- Management of historical data from thousands of analyzers over several years
- Analysis in a user-friendly environment suitable for both experts and beginners

Solution compatible with MAP power quality analyzers developed for arbitration on power quality at any point in the power grid system.

- Complies with IEC 61000-4-30 class A
- Memory from 4 to 14 weeks of recording 24/7
- 2 MHz HF transient capture



IEC
61000-4-30
Class A



Tariff meter



ALTYs tariff meter, MID-certified class C, intended for electrical energy consumers and producers connected to the medium-voltage grid.

- Two separate tariff profiles (supplier and distributor) are provided to meet the electricity market deregulation requirements
- Diversity of tariff offers taken into account thanks to the flexibility of the tariff structure
- Metering data available to customers via a dedicated serial port. Customers are informed of their consumption in real time and can manage their processes automatically
- Customer-dedicated communication port for running queries on the meter and reading the tariff parameters and consumption quantities measured



Current transformers



LV current measurement transformers range, ideal for tariff-metering applications.

- Accuracy class: 0.2S
- Appropriate level of their accuracy load and possibility of seals
- Single-range or multi-range models

Three-phase plate-mounted range designed to facilitate installation and protection.

- Implementation of primary terminals accepting copper or aluminium conductors
- Primary cable connection without specific tools
- Built-in short-circuiting switch
- Single-range or multi-range models



Critical auxiliary relays



Auxiliary relays range for the most difficult applications due to their long life span.

- Large choice of functions for both quick, repetitive switching and occasional switching with variable loads
- Guaranteed to operate even in disturbed environments
- K3 qualification in response to the requirements for rugged design and earthquake resistance in nuclear applications
- Very wide range of sockets



Analog panel meters



Analog panel meters range designed to meet the stringent requirements of power plants in terms of reliability and rugged design.

- Customizable gradation for optimum visibility
- "Tailored" adaptation to meet your specific needs
- Qualified according to the IEEE reference system for nuclear applications (Normeurope range)





10 subsidiaries worldwide

Germany . Austria . China . Spain . Italy . Lebanon . Sweden . Switzerland . United Kingdom . United States

A French brand

Enerdis, a French company which is part of the Chauvin Arnoux Group, meets the specific needs of decision-makers in the energy sector by contributing its experience built up over a period of more than thirty years. Manufacturing of the products is handled by our teams, from the design phase through to the final inspections of the equipment. These experienced, qualified teams guarantee quality, reliability and durability.

A long-term offering

Our total mastery of our industrial know-how in our factories in France and our ability to identify the changes in the market in terms of the components and materials used in our instruments guarantee that our equipment's quality and availability will remain constant over the long term.

Present internationally

As a member of the Chauvin Arnoux Group, Enerdis benefits from a worldwide presence relayed by a network of ten subsidiaries and expert partners in all the world's major countries.

Acknowledged expertise

Whether in nuclear, thermal, hydroelectric or renewable power plants, Enerdis covers all your specific measurement, metering and supervision needs with a product offering capable of working in very demanding environments.

On power transmission and distribution grids, Enerdis offers suitable, high-technology solutions.

By closely monitoring the new technologies and standards, we are able to offer the most innovative solutions while complying with the applicable standards.

The teams at Enerdis are always ready to hear about your specific applications and can meet your requirements for tailored adaptations and development.



References

CIE (Ivory Coast),
CNNC (China),
EDESUR (Argentina),
EDF (France),
ENEDIS (France),
ENEL (Italy),
ENGIE Electrabel (Belgium),
ESKOM (South Africa),
KHNP (South Korea),
ONEE (Morocco),
RTE (France),
SEC (Saudi Arabia),
SENELEC (Senegal),
SONABEL (Burkina Faso),
STEG (Tunisia),
etc.

Product and service catalogs & brochures



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