

E/NTES



Product Range

- Power Quality & Energy
- Power Factor Correction (PFC)
- Energy Management
- Protection
- Control





EMR Series



- EMR Series panel type network analyzers are developed with state of art slim&compact design (only 45mm depth).
- EMR series measure high accuracy class for voltage, current, Class 1 for energy, power and up to 31st individual harmonics.
- RS-485 Modbus RTU communication
- Log record (2MB internal memory).
- Flexible alarm configurations with
- DI/DO and alarm contact output based on your requirements.

MPR-4 Series New Generation Network Analyzers



Monitor

Monitor production processes in real time and track production costs.



Measure

Measure and record operation times and total energy costs of your production.



Analyze

Analyze electrical parameters with MPR series to improve energy efficiency.



And Much More

Check device inputs-outputs and customize your devices with EnerMedic or Enerthings software solutions



MPR-3 Series

MPR-3 Series panel type mini network analyzers are developed for switch panels where mounting space matters. They are compact solutions for detailed measurement and analysis of electrical parameters.



MPR-2 Series

MPR-2 Series DIN type network analyzers are designed for detailed measurement and analysis of electrical parameters. Real-time monitoring is supported via LCD screen.



MPR-1 Series

MPR-1 Series DIN type network analyzers are designed for the measurement of electrical parameters on machines and switchboards. They are a cost-effective measurement device series for energy monitoring software.



Multimeters

Multimeters are designed to measure electrical parameters such as current, voltage, frequency and $\cos\phi$ of systems in plants.



Powermeters

Powermeters are designed to measure the active, reactive and apparent power values and active, reactive energy values of each phase in the system.



Am/Volt/Cos ϕ meters

Voltmeters, Ammeters, $\cos\phi$ meters are designed to measure related values of system in plants. Also DC versions of Ammeters and Voltmeters are designed to measure the current or voltage of a DC system.



ES3 Series Energy Meters

ES Series Energy Meters, with its screened design, measure energy in 3 phases and 4 quadrants. ES3 Series monitor energy consumption and billing. Water flow and natural gas flow meters can be read and these data can be monitored via EnerMedic.



ES Series Energy Meters

Energy meters are single-phase compact solutions that are used to measure the active energy consumption in your plant or your company.



Current/Voltage Transducers

Transducers are devices designed to convert electrical current signals into analog signals into their inputs.

RGA/RGSR Series

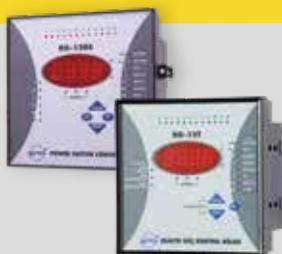
- A new generation PFC solution. (12+SVC,16+SVC and 20+SVC steps options)
- RGSR Series support Static VAR Compensation
- PFC by measuring the current and voltage of 3 phases individually in systems with unbalanced loads
- Innovative solution with PFC modes
- Real-time monitoring with graphic screen
- Increased PFC precision with second PFC current input
- Up to 51st current and voltage harmonics
- THDI and THDV
- 15, 20 and 24 steps options (RGA Series)
- MV reference models

RGP Series

- Thanks to patented Smiley Mode, ENTES RGP new generation power factor controllers show the PFC status without going to near the device. 16:10 format wide screen LCD is very important for ENTES's new design approach to display legible measurement parameters on screen
- Up to 31st current and voltage harmonics measurement
- 9 and 12 steps options(SVC Alternative)
- Opportunity to configure the power factor correction activity with eco, standard and sensitive mode options
- Controlling capacitors or reactors at the same time
- Automatic step recognitions and phase sequence correction
- Internal temperature sensor and fan output (Optional)
- Modbus communication

RGI Series

- PFC by measuring current on single phase in systems with balanced loads
- 4, 6, 9 and 12 step options
- Up to 31st current and voltage harmonics measurement
- THDI and THDV
- Switching Capacitors and Shunt reactors
- Automatic step recognition
- Internal temperature sensor and fan output (Optional)
- Modbus communication (Optional)

RG-B & RG-T Series

- PFC by measuring current on single phase in systems with balanced loads
- 96x96mm dimension (144x144mm option for RG-T series)
- 8 and 12 step options (6 step option for RG-T Series)
- Up to 19th current and voltage harmonics measurement (RG-B Series)
- THDI and THDV (RG-B Series)



Other PFC Equipments



Current Transformers

Current transformers are very important equipments which are used with ENpower and ENergic group's devices in applications where it is difficult or impossible to read current directly. Current transformers transform the high level primary currents to lower secondary currents like 1A, 5A or 330mV .

These are Low Voltage (A series), Medium Voltage Compatible (MV Series), Split-Core (AYS and CYS Series), Clamp Type (CCT Series), and Three Phase Current Transformers.



Low Voltage Power Capacitors

PFC Contactors

Inductive Load Drivers (SVC)



Shunt Reactors

Static Contactors

Harmonic Filters

Discharging Unit



Energy Management

Software



It is required to measure system parameters and data such as capacitor levels, reactive energy ratios, etc. regularly and analyze the measured data comprehensively.

ENTES offers a unprecedented monitoring and analysis with EnerMedic energy management solution. Therefore, ENTES can always remote monitoring, manage, configure and keep PFC ratio under control regularly with the solutions it offers.

ENTES ETMO & GEMO Series Modem

Hardware



ETMO Modem

ETMO Modems connect to the serial port to be read as Modbus-TCP or Transparent over Ethernet. EnerMedic can be used in ETMO Modems DR versions without the need for any configuration.



GEMO Modem

GEMO Modems connect to the serial port to be read as Modbus-TCP or Transparent over GSM-2G-3G connections and optionally over Ethernet. EnerMedic can be used in ETMO Modems DR versions without the need for any configuration.

Protection

E/Wguard



GKRC-E Series

GKRC-E Series, with its new screened design, provide safe protection against over-under voltage protection, over-under frequency protection, voltage balance protection, neutral break, phase sequence and phase failure of your equipment in facilities where voltage fluctuations are experienced intensely.



Voltage Monitoring Relays

GKRC series voltage monitoring relays are designed to protect single or three-phase systems against voltage changes and phase sequence failure. DGRC series voltage monitoring relays are designed to protect single or three-phase systems in cases of permanent voltage drops.



Current Monitoring Relays

AKC Series Current Monitoring Relays are designed to protect motors and systems against under or over current with a current adjustment and two delay adjustments.



Phase Failure Relays

MKC - MKS Series Phase Failure Relays are designed to prevent over-heating and burning of 3 phase motors due to phase failure or unbalanced voltage (asymmetry) in industrial plants.



Phase Sequence / Thermistor Relay

FR-02 Phase Sequence Relay controls the order of 3 phases feeding motors. PT-01 Thermistor Relay is developed to protect motors with PTC.



Power Supplies

Power Supplies provide safe and accurate DC outputs at various power ranges, increasing the productivity of your automation solutions with wide voltage ranges and adjustable output voltages.

E/Wlogic



Astronomic Time Relays

- Automatic sunrise and sunset calculation
- 24/7 programming based on city name or geographical coordinates
- 15 or 32 programs and precise timing
- 1 CO or 2 CO contact outputs (16A)
- Interchangeable battery (optional)



Time Relays

MCB Series Time Relays are designed to control devices in desired time interval. They offer a number of different timing functions with adjustable time ranges.



Digital Time Relay

- Automatic sunrise and sunset calculation.
- 24/7 programming based on city name and geographic coordinates.
- 15 or 32 programs and precise timing.
- Long-life battery



Multifunctional Time Relays

Multifunctional Time Relays offer flexible solution that are tailored to the objective with trigger-controlled rich sub-functions in addition to their main functions.



Liquid Level Controllers

Liquid Level Controllers are used for controlling liquid levels in wells and liquid tanks at industrial sites.



Daylight Switches

FG Series Daylight Switches are designed to control lighting systems according to environmental light levels. Daylight Switches monitor the daylight in connection with a light sensor.



ENTES is a European leading technology brand that offers solutions on energy efficiency and power quality Wherever Energy is since 1980. ENTES, with its more than 40 years of experience, offers special solutions in energy efficiency.



ENTES is a European leading technology brand that offer solutions **Wherever Energy Is.**

ENTES develops **Integrated Energy Management Solutions** for efficient, high quality and sustainable energy. ENTES produces software and hardware products in the state-of-the-art facilities, markets them to more than 140 countries, as well as offering after-sales services.

Solutions offered by ENTES cover an extensive process from analyzing the energy to protecting and inspecting the machinery.

ENTES offers solutions in industrial facilities, commercial buildings, institutions, etc., in all areas where energy is used.

The quality offered by ENTES hardware products in the areas of power quality, energy measurement, power factor correction, protection & control are powered by global certifications such as CE, KEMA, CSA-US, UL and GOST-R.



ENTES has experience for global markets over 140 countries and a worldwide -recognized brand in the industry with offices in Germany, Greece and India.

Thanks to the cloud technologies it developed, ENTES pioneered new concepts in technology such as the IoT and Industry 4.0.



ENTES offers Integrated Energy Management Solutions for efficient, high quality and sustainable energy management experience at facilities.

The EnerMedic solution by ENTES is one of the best examples for cloud services. ENTES hardwares can directly be connected to ENTES.NET servers on the cloud.



The UX and UI design capabilities and investments in these areas make ENTES completely different from its competitors. ENTES has registered the results of these studies with international awards.

RGP by ENTES is **“the new face of power factor correction”**, has made a great impression on the market. Furthermore, it achieved the second best design award at the **ELECRAMA** fair in **INDIA**, proving once again that ENTES has a strong sense of design.



In RGP, ENTES used the **“screen faces”** -a new step in the human - machine communication- in a reactive relay for the first time, triggering a disruptive change in the sector dynamics.





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