Solutions for energy management and control

NETWORK ANALYZERS

MID ENERGY COUNTERS

ROGOWSKI COILS

PQ METERS - CLASS A

GENERAL CATALOGUE 2016
Algodue is certified for designing, manufacturing and selling its measurement solutions.

» History

It all began in 1986...
The founder, Mr Pietro Platini, decided to create Algodue Elettronica: the aim was to project, design and sell solutions for energy saving.

First creation...
At first, the focus was set on the Italian market, offering peak consumption controllers and developing special solutions for the national electricity utility. Then the company started to project and design the first groundbreaking power meter analyzer for measurement and consumption control.

The consolidation
Results start to spread internationally, as the company established significant relationships with medium and large sized customers. There is a continuous effort to invest in new technologies: the company keeps on widening its product range.

R&D department
The unique experience acquired on the global market, in customer caring and in solution providing, improves the company ability to grant an up-to-date technical knowledge.

Today...
The advent of the new generation strengthens passion and team spirit of the company: Algodue is a young and vital company, able to look after every single detail, guaranteeing unique and reliable quality solutions.
PASSION FOR YOUR SUCCESS

Why Algodue

» OEM

Customised solutions
Algodue Elettronica offers customised solutions to monitor and manage energy consumption: all our devices can be adapted, customised and developed according to our partner’s requirements.

We can customise:
- Technical specifications
- Product design
- Product logo and name
- Technical documentation

Technical assistance before and after sales
We give our customer a red carpet treatment. We guarantee expertise and courtesy.

We evaluate the feasibility of every technical possibility for customised solutions. We promptly sort out all kinds of requirements.

We are protagonist in designing and manufacturing measuring devices, we are characterized by the short time-to-market, by flexibility and the ability to provide solutions to small/medium as well as multinational companies, by the development of innovative products.
Power analyzers for energy control in industrial environment for Din Rail and panel mounting (96x96mm and 144x144mm). Suitable to be combined to Rogowski coils.

Network Analyzers

UPM209, UPM209RGW, UPM309, UPM309RGW - Small size, high performance
Innovative solution for measuring electrical parameters.

» Benefits
- Compact devices for consumption analysis and control, offering an excellent price/performance ratio.
- The use of Rogowski coils for current measurement grants a fast installation especially on existing plants.

» Applications
- Energy audit, retrofitting.
- Energy monitoring systems.
- Load monitoring of single machines.

UPT210, UPM304, UPM307 - Easy to use
Suitable to monitor energy consumption and the main electrical parameters.

» Benefits
- Simple solution offering an excellent price/performance ratio.
- Compact and simple to install.
- Suitable to be combined to Rogowski coils.

» Applications
- Switchboards, generators etc.
- Energy monitoring systems.
- Load monitoring of single machines.

UPM215, UPM310, UPM315, UPM3080, UPM3100 - Full optional
Suitable to satisfy advanced requirements as for consumption monitoring and analysis.

» Benefits
- Wide LED or LCD display excellent to read.
- Advanced features to measure electrical parameters and to analyse power quality.
- Up to 4 optional plug in boards.
- Suitable to be combined to Rogowski coils.

» Applications
- Power monitoring and control systems.
- Power peak control.
- Harmonic monitoring.
- Motor current peak study.
- Remote consumption monitoring and cost calculation.
**MID Energy Counters**

**NEW UEM SERIES - Compact and versatile**

Suitable for an efficient energy management according to EN 50470 standard and MID certification, with built-in communication suitable to any requirement.

**Benefits**
- Remote management by built-in port: RS485 Modbus, M-Bus or Ethernet ModbusTCP.
- For billing purposes.
- Three phase 1/5 A CT and three phase direct connection 80 A version.
- Measurement of active, reactive and apparent energy on 4 quadrants.

**Applications**
- Accounting and billing of consumptions in camp sites, malls, residential areas, naval ports, office buildings etc.
- Internal allocation of the consumptions for civilian and industrial buildings.
- Totalization of the electric energy in the industry for each single line or machine.
- Measurement of energy generated by renewable sources such as solar, wind, wave etc.

**NEW UEC SERIES - Simple and reliable**

Suitable for an efficient energy management according to EN 50470 standard and MID certification.

**Benefits**
- Extreme flexibility with optical port to be combined to external communication modules.
- For billing purposes.
- Three phase 1/5 A CT and single and three phase direct connection 80 A version.
- Single phase direct connection 32 A with or without built-in communication.
- Measurement of active, reactive and apparent energy on 4 quadrants.

**Applications**
- Accounting and billing of consumptions in camp sites, malls, residential areas, naval ports, office buildings etc.
- Internal allocation of the consumptions for civilian and industrial buildings.
- Totalization of the electric energy in the industry for each single line or machine.
- Measurement of energy generated by renewable sources such as solar, wind, wave etc.

**COMMUNICATION MODULES - Fast to install**

A wide range to be combined to UEC energy counters: RS485, M-BUS, LAN GATEWAY, KNX

**Benefits**
- Compact size (1/2 modules).
- Easy to use: no physical connection due to optical port to be combined with the energy counter.
- Possibility to switch the use of the communication module according to the required application.

**Applications**
- The same described for energy counters.
MFC150 - *Excellence in the accuracy*
Current sensor based on Rogowski principle: a single model to measure from mA to hundreds of kA.

**Benefits**
- Universal: it is not required to have different model as for CTs.
- Measurement uniformity at any position of the conductor inside the coil.
- Supplied already calibrated.
- Coil cross section: 8 mm.
- Bayonet connector including possibility to adjust calibration.
- Excellent degree of rejection to the external current conductor.
- Available in different colours on request.
- Completely shielded.

**Applications**
- Measuring devices, lab instrumentation.
- Power monitoring & control systems.
- Monitoring of single machine load.
- Harmonics and transients monitoring.
- Very high current measurement.
- Retrofitting.
- New plant design.

MFC190 - *High sensitivity*
Current sensor based on Rogowski principle: a high output value to give out a high sensitivity signal.

**Benefits**
- Coil cross section: 12 mm.
- High output value: 0,3 V / kA.
- Suitable to measure current from mA up to hundreds of kA.
- Very useful with large size or awkward shaped conductors or in places with limited access.
- It can be hanged on the conductor to be measured.
- Completely shielded.

**Applications**
- Measuring devices, lab instrumentation.
- Power monitoring & control systems.
- Monitoring of single machine load.
- Harmonics and transients monitoring.
- Very high current measurement.
- Retrofitting.
- New plant design.

ROGOWSKI INTEGRATOR - *Flexible systems*
Adapters for Rogowski coils signal equalisation.

**Benefits**
- Suitable to be combined with MFC150 and MFC190.
- Different selectable scales.

**Applications**
- Lab measurements.
- Welding machine control.
- SCADA systems.
- PLC interfaces.
- Current measurements in true RMS value.
- DC ripple measurement.
**PQM3000, PQM3000RGW - Class A: top of the range**

Class A rack 19” power quality analyzer according to IEC/EN 61000-4-30:2015 Ed.3.

**Benefits**
- 19” RACK device for Power Quality analysis and control, offering an excellent price/performance ratio.
- Continuous monitoring of the PQ and Class A certified measurements for voltage characteristics.
- Simultaneous recording of events, Min/Avg/Max LOG and energy counters.
- Several possibilities for instrument data transmission: Ethernet, Modbus TCP, 3G network.
- Rogowski coils included to grant a quick installation as well as an accurate current measurement.

**Applications**
- Disturbance analysis.
- Power monitoring and control systems.
- Power peak control.
- Harmonic and interharmonic monitoring.
- Motor inrush current study.
- Remote consumption monitoring and cost calculation.

**PQM4000, PQM4000RGW - Class A: touch the excellence**

Class A DIN 192x144 power quality analyzer according to IEC/EN 61000-4-30:2015 Ed.3.

**Benefits**
- 144x192mm panel mounting device with 7” TFT display for Power Quality analysis and control.
- Continuous monitoring of the power quality and Class A certified measurements for voltage characteristics.
- Simultaneous recording of events, Min/Avg/Max LOG and energy counters.
- Several possibilities for instrument data transmission: Ethernet, WIFI, Modbus RTU/TCP, USB.
- Integrated GPS module.
- Rogowski coils included to grant a quick installation as well as an accurate current measurement.

**Applications**
- Disturbance analysis.
- Power monitoring and control systems.
- Power peak control.
- Harmonic and interharmonic monitoring.
- Motor inrush current study.
- Remote consumption monitoring and cost calculation.
“Getting together is a beginning, 
staying together is a progress, 
working together is an achievement”

Henry Ford