



Solutions for energy management and control





MID ENERGY METERS



ROGOWSKI COILS



PQ METERS - CLASS A



GENERAL CATALOGUE



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.

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







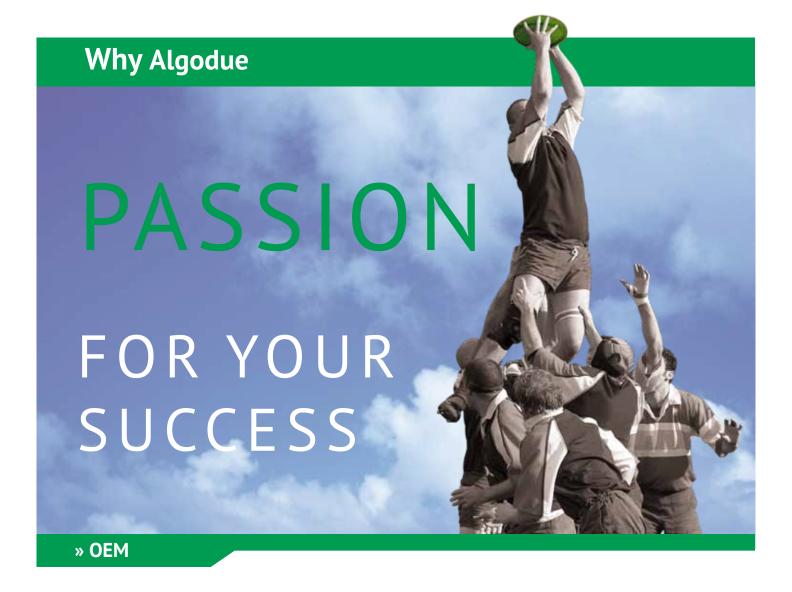












Customised solutions

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.

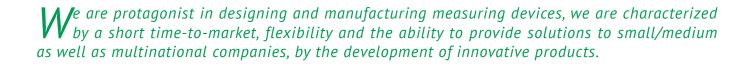
Technical assistance before and after sales

We give our customer a red carpet treatement. 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 can customise:

- Technical specifications
- Product design
- Product logo and name
- Technical documentation





ower 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, UPM309 - *Small size, high performance*

Innovative solution for measuring electrical parameters.

» Benefits

- Compact devices for consumption analysis and control, offering an excellent price/performance ratio.
- Data read by PC allows to generate consumption profiles, recorded values trend, alarms/events report, critical value and costs calculation.

» Applications

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





SMART KIT: UPM209RGW, UPM309RGW - measuring is smart

Smart solution including a three phase analyzer and no. 3 Rogowski coils to measure from few A to 20kA in a special package.

» Benefits

- Compact devices for consumption analysis and control.
- In case of changes on the plant, the instrument can be fit for the current consumption simply selecting a new current full scale among the proposed
- The use of Rogowski coils for current measurement grants a fast installation expecially 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

» Applications

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



Suitable to satisfy advanced requirements as for consumption monitoring and analisys.

» Benefits

- Wide LED or LCD display excellent to
- 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.







Single and three phase meters for consumption measurement and control, MID certified, to be combined with **communication modules** or with built-in **communication.**



» MID Energy Meters









UEM SERIES - Compact and versatile with built-in communication

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.
- Version 40A and 80A single-phase direct connection.
- 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.



UEC SERIES - Simple and reliable

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

Possibility of combination with external communication.

» 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.
- Version 40A and 80A single-phase direct connection.
- 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 meters: 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 meter.
- Possibility to switch the use of the communication module according to the required application.

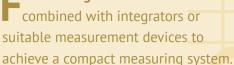
» Applications

• The same described for energy meters.





Texible Rogowski coils to be combined with integrators or suitable measurement devices to









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 irregular 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.





Meters - Class A certified according to IEC/EN 61000-4-30:2015 Ed.3 to monitor power quality both for industrial applications and utilities.



» PQ Meters - Class A



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/Avq/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 colour 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/Avq/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.





Innovative Electronic Systems



"Getting together is a beginning, staying together is a progress, working together is an achievement"

Henry Ford