

## Press Release

### **EM511: THE SINGLE PHASE ENERGY ANALYSER SERIES WITH MODBUS RTU OR M-BUS**

Simple, intuitive, easy-to-install remote reading energy analysers suitable for load balancing in EV charging or PV storage applications.

Lainate, September 2023 - Carlo Gavazzi Automation, the international electronics group with activities in the design, manufacture and marketing of electronic equipment, today presents the new EM500 series 1-phase energy analyser.

The EM511 is a bidirectional 1-phase energy meter with a backlit 9-digit display and 0.001 kWh resolution. Its energy measurement is bi-directional, thus enabling the separate measurement of imported and generated energy.

The EM511 analyser reduces commissioning time thanks to a quick setup procedure. In addition to energy meters, electrical variables and total harmonic distortion, the EM511 provides useful information for the maintenance team, such as run-hour meters and total operating time.

“Due to the 100 ms serial data refresh time, the EM511 is the ideal solution for storage applications, where a fast reaction is required to avoid feeding the grid when it is not allowed or to manage and optimize energy flows.” Andrea Bernardi, International Product Manager, says. “With this launch we also aim to integrate the EM511 with the successful EM100 series, especially for the most innovative applications in the Energy and Building efficiency industry. At the same time we are enlarging the EM500 series, providing additional meters suitable for integration into our energy management monitoring solution, without the need of writing new drivers.

Developed in our competence centre in Italy, the EM511 series has been specifically designed to meet the requirements of energy analysis in Industrial and Building automation energy efficiency applications, for cost allocation and power metering.

#### **Main technical features**

- EM511: Class 1 (kWh) according to EN62053-21, class 2 (kvarh) according to EN62053-23,
  - Current inputs: direct connection up to 45 A
- Instantaneous variables readout: (max 5+3) DGT, energy readout: 9 (6+3) DGT
- Voltage inputs: 120 to 240 V with self-power supply
- Current and voltage THD (up to 15th harmonic)
- Energy measurements (imported/exported): total kWh, kvarh, kVAh; partial kWh, kvarh, kVAh
- Run hour meters (relevant to both imported/exported energy: 8+2 DGT). Total operating time
- Digital output (O1 version), or RS485 Modbus (S1 version) or M-Bus (M1 version)
- Alarm management
- Programmable display and slide show function
- cULus approval;

#### **ABOUT CARLO GAVAZZI AUTOMATION**

Carlo Gavazzi Automation is an international electronics group with activities in the design, manufacture and marketing of electronic equipment targeted at the global markets of industrial and building automation.

Carlo Gavazzi Automation provides customers with technologically innovative, high quality and competitive solutions, in compliance with their requirements and expectations through its 22 National Sales Companies in Europe, the Americas and Asia & Pacific, operating with its production sites in Denmark, Italy, Malta, Lithuania and China.

#### **For further information:**

Carlo Gavazzi Automation SpA - Via Milano 13 – 20045 Lainate (MI) - Italy  
Marketing and Communication - [info@gavazziautomation.com](mailto:info@gavazziautomation.com) - [www.gavazziautomation.com](http://www.gavazziautomation.com)