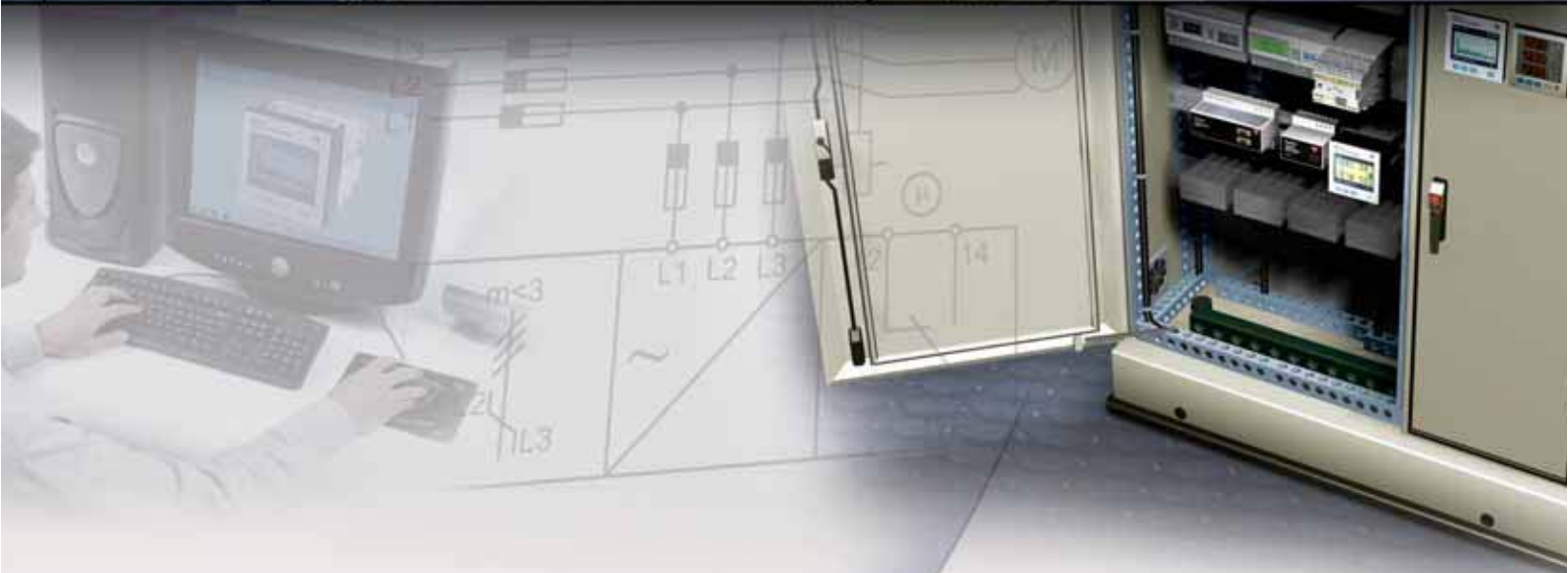


CARLO GAVAZZI
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Solutions for Panel Builders (Power Distribution Products)



Features and Benefits for Panel Builders' Requirements

- ELECTRICAL PARAMETERS CONTROL
- COST ALLOCATION
- MACHINE ALARM MONITORING
- LIGHTING CONTROL
- LOAD SWITCHING
- TEMPERATURE MONITORING
- BILLING



www.carlogavazzi.com/ac

Designed to Market Requirements

Dedicated applications engineering teams design special products upon request from the customer.

Solution to Applications Challenges

The Carlo Gavazzi individual product ranges complement one another thereby offering the customer all the advantages of a synergistic range of products in terms of application and availability.

Guaranteed reliability

Each product group is designed and manufactured in a center of excellence to assure that each individual products is the best in its field. Carlo Gavazzi products are subject to stringent quality tests to guarantee they exceed the performance we specify.

Visit our website for more details, technical information or datasheets download.



Airports



Production Facilities

Needs

- ELECTRICAL PARAMETERS CONTROL
- COST ALLOCATION
- MACHINE ALARM MONITORING
- LIGHTING CONTROL
- LOAD SWITCHING
- TEMPERATURE MONITORING



- The knowledge of production costs are imperative to define the proper manufacturing cost for any produced good. Energy Meters combined with our Dupline products provide a means to measure consumed energy during production processes and to centralize the information.

- The Dupline system in a production facility is capable of monitoring and logging the machine run time and collecting all alarm signals. Therefore, this will improve the efficiency of the facility by enabling an operator to identify a problem immediately and planning for the proper maintenance, which will result in reducing machine downtime.



Apartments



Shopping Centers

Needs

- BILLING
- ALARM MONITORING
- LIGHT CONTROL



- In condominiums, in order to have one service contract, rather than several contracts, a sub-metering device for each tenant is required. The Dupline system can gather the consumption readings from the Energy Meters* and centralize them.

Therefore, the energy can be purchased at a better price since the contract is based on higher energy consumption. * (Also via GSM or Internet)



Amusement Parks



Resorts & Hotels



Hospitals



Public Buildings

Needs

- ELECTRICAL PARAMETERS CONTROL
- COST CONTROL
- ALARM MONITORING
- LIGHTING CONTROL



• *EM4 ... , WM22 ...*



• *WM3 ... , WM4 ... , WM23 ... , WM24 ...*



• *PQT90 ...*



• *G3800 ... , G3420 ... , G3429 ... , G3430 ... , G4420 ... , G8910 ... , G8911 ... ,*

• **Software**

WATTSOFT2, WATTSOFT3, SPECVIEW, INTELLUTION, SCADA



- In hospitals, the highest level of safety must be obtained, so you must be able to avoid damages of the loads, overpower demand and poor installation. CARLO GAVAZZI Power Analyzers provide local control of electrical parameters and alarms, therefore minimizing downtime.

- Whenever the reliability of the incoming power supply is vital (hospitals, amusement parks, etc.) the CARLO GAVAZZI Energy Management products, such as the WM3, WM4 and PQT90 Series can display local pre-alarms and alarms based on critical electrical parameters. Furthermore, thanks to WATTSOFT's

capability to collect data and provide historical trends the operator can localize the problems immediately, providing an uninterrupted power supply.

- Resorts and hotels require an adequate level of comfort for their guests. CARLO GAVAZZI Energy Management products, such as the WM22, WM23, WM24 and WM3 Series can display local alarms while the Dupline system can gather them together along with other alarms, such as those from handicapped rooms, faults in ventilation or air conditioning system, water leakage, etc.. The guests won't perceive poor service since the staff is promptly notified and can react in time.



Camping Sites



Marinas

Needs

- BILLING
- LIGHT CONTROL
- LOAD SWITCHING



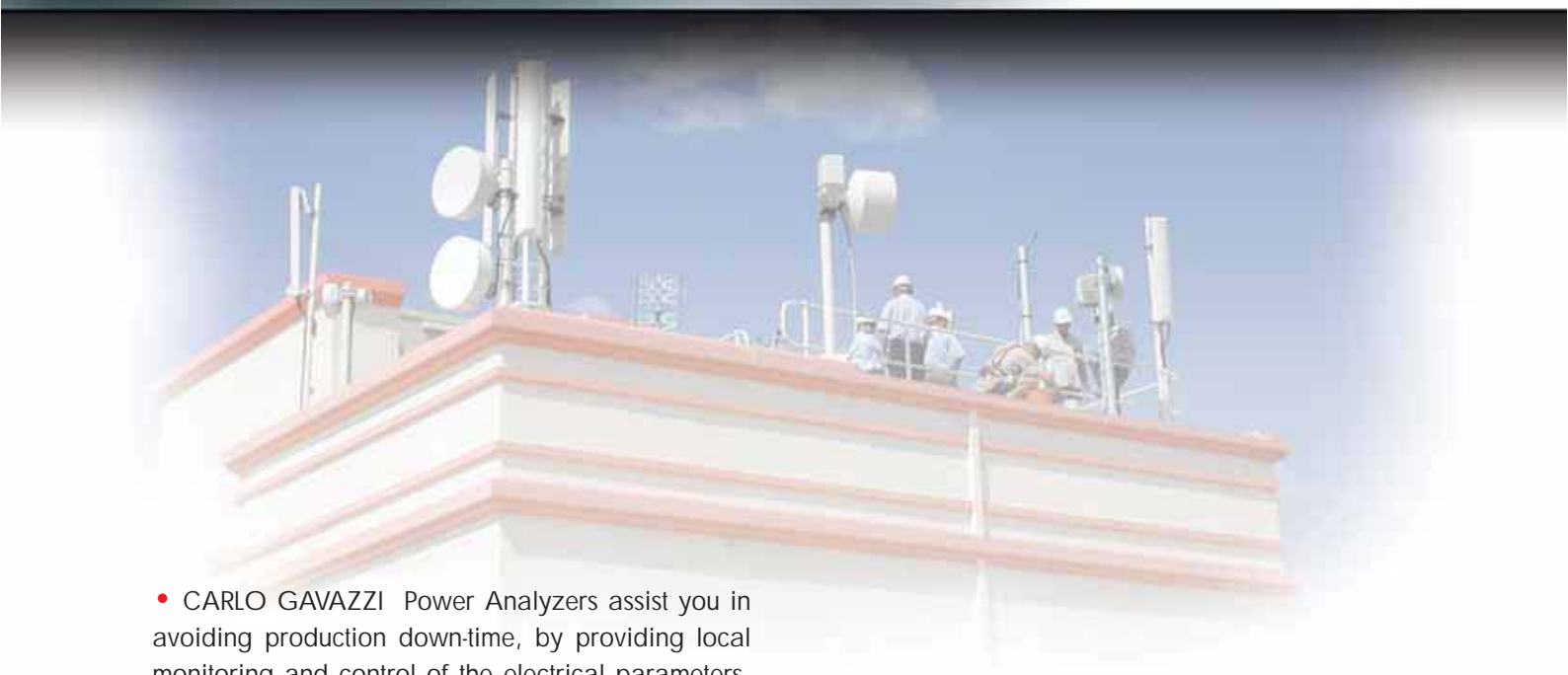
• The requirement for billing the tourist according to his real consumption of energy and water is becoming more and more present in marinas and camping sites. CARLO GAVAZZI Energy Management combined with Dupline's integrated communication module

can locally gather the consumption data and transmit it to a central PC, which can issue the bill as soon as the customer is leaving: it makes the customer happy, as they are paying only for what they've used.



Needs

- ELECTRICAL PARAMETERS CONTROL
- COST ALLOCATION



- CARLO GAVAZZI Power Analyzers assist you in avoiding production down-time, by providing local monitoring and control of the electrical parameters. This reduces the risk of damaged loads and overpower demand.

Airports

Production Facilities



Apartments

Shopping Centers



Amusement Parks

Resorts & Hotels

Hospitals

Public Buildings



Camping Sites

Marinas



Telecommunications



Our Product Range



EM1 DIN

MAIN FEATURES

- Dimensions: 89x35x58.5
- 1-Phase energy meter. 1-Phase system. Active energy measurement.
- Istant variables: N.A.
- Energy variables: 5+1 DGT (0. kW)
- Accuracy: cl.2 (EN61036)
- Degree of protection: IP65
- Approvals/Marks: CE

Energy Meter

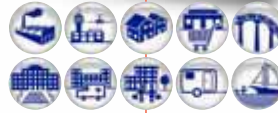


EM3 DIN

MAIN FEATURES

- Dimensions: 90x162.5x63
- 2 / 3-Phase unbalanced 3 or 4 wires energy meter. Direct connection up to 90A. 6+1DGT electromechanical display.
- Istant variables: N.A.
- Energy variables: 6+1 DGT
- Accuracy: cl.2 (EN61036) cl.3 (EN61268)
- Degree of protection: IP65
- Approvals/Marks: CE

Modular Energy Meter



EM4 DIN

MAIN FEATURES

- Dimensions: 90x162.5x63
- 3-Phase energy meter. Direct connection up to 90A. Back-lighted LCD display. Measurement of system and phase variables, energy by timeperiods, m³H₂O and m³GAS
- Istant variables: 3 1/2 DGT
- Energy variables: 8 +7 1/2 DGT
- Accuracy: cl.1 (EN61036) cl.2 (EN61268)
- Degree of protection: IP40
- Approvals/Marks: CE

Energy Meter



WM12 DIN

MAIN FEATURES

- Dimensions: 90x107.8x64.5
- 3-Phase multi-function power indicator. System: VLL, VLN, An,VA, VAdmd, Wdmd, W, var, PF, Hz. Max: A, Wdmd. Single phase: VLL, VLN, A, VA, W, var, PF.
- Istant variables: 3 DGT
- Energy variables: N.A.
- Accuracy: ±0,5% FS (V, A)
- Degree of protection: IP40
- Approvals/Marks: CE-UL

Multi-function Meter



WM3 96

MAIN FEATURES

- Dimensions: 96x96x124
- 3-Phase power quality analyz. System: VNL, VLL, An, VA, VAdmd, Wdmd, W, var, PF, Hz, THD, total/partial KWh, kvarh (4tariff). Single phase: VNL, VLL, A, W, var, PF, THD.
- Istant variables: 4 x 3 1/2 DGT
- Energy variables: N.A.
- Accuracy: ±0,5% RDG (V, A)
- Degree of protection: IP65
- Approvals/Marks: CE, UL, CSA

Modular Power Quality Analyzer



WM4 96

MAIN FEATURES

- Dimensions: 96x96x124
- Universal utility meter and power analyz. 32 bit µP based. Load profile indication. Alarm outputs. SMS messages. Measurement of all instantaneous variables. Energy, water and gas metering.
- Istant var.: 4x3 1/2 or 4x4DGT
- Energy vari.: 4x9DGT, 4x6DGT
- Accuracy: ±0,5% RDG (V, A)
- Degree of protection: IP65
- Approvals/Marks: CE-UL-CSA

Modular Universal Utility Meter

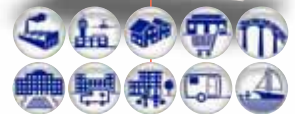


PQT90

MAIN FEATURES

- Dimensions: 90x90x138
- Power quality transducer. 32 bit µP based. Alarm outputs. SMS messages. Measurement of all instantaneous variables. Energy, water and gas meter. 2MB Memory+Real time clock.
- Istant variables: N.A.
- Energy variables: N.A.
- Accuracy: class 0.5 (A, V)
- Degree of protection: IP20
- Approvals/Marks: CE-UL-CSA

Power Quality Transducer



G3800.../G3891...

MAIN FEATURES

- G3800... Controller and Modbus Interface with built-in GSM or external Radio Modem.
- No. of channels: selectable
- Power suppl: 800=10-30 VDC 230 = 115/230 VAC
- Degree of protection IP20
- G3891... Fieldbus Gateways for Profitbus DP and DeviceNet.
- No. of channels: selectable
- Power supply: 230 =115/230 VAC
- Degree of protection IP20

Channel Generators/Interfaces

Panel Builders (Power Distribution)



WM14 DIN

MAIN FEATURES

- Dimensions: 90x107.8x64.5
- 3-Phase multi-function power indicator.
System: VLL, VLN, An, VA, VAdmd, Wdmd, W, var, PF, Hz. Max: A, Wdmd. Single phase: VLL, VLN, A, VA, W, var, PF.
- Istant variables: 3 DGT
- Energy variables: 8 +1 DGT
- Accuracy: $\pm 0,5\%$ FS (V, A)
- Degree of protection: IP40
- Approvals/Marks: CE-UL

Power Analyzer



WM22 DIN

MAIN FEATURES

- Dimensions: 90x162.5x63
- 3-Phase power analyzer. Direct connection up to 90A. Back-lighted LCD display. Measurement of system and phase variables. Measurement of THD.
- Istant variables: 4x3 1/2 DGT
- Energy variables: 7 1/2 DGT
- Accuracy: $\pm 0,5\%$ RDG (A, V) cl.1(EN61036) - cl.2(EN61268)
- Degree of protection: IP40
- Approvals/Marks: CE

Modular Power Analyzer

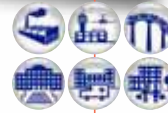


WM23 96

MAIN FEATURES

- Dimensions: 96x96x124
- 3-Phase power quality analyz. System: VNL, VLL, An, VA, VAdmd, Wdmd, W, var, PF, Hz, THD. Single phase: VNL, VLL, A, W, var, PF, THD. Max: W (standard), A [A].
- Istant variables: 4 x 3 1/2 DGT
- Energy variables: N.A.
- Accuracy: $\pm 0,5$ FS (V, A)
- Degree of protection: IP65
- Approvals/Marks: CE-UL-CSA

Power Quality Analyzer

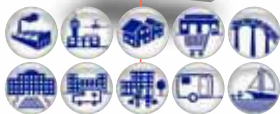


WM24 96

MAIN FEATURES

- Dimensions: 96x96x124
- 3-Phase universal utility meter. System: VNL, VA, VAdmd, var, PF, Hz, total/partial KWh, (4tariff) total/partial kvarh, gas, H2O. Single phase: VNL, A, W, var, PF.
- Istant variables: 4 x 3 1/2 DGT
- Energy variables: N.A.
- Accuracy: $\pm 0,5\%$ RDG (V, A)
- Degree of protection: IP65
- Approvals/Marks: CE-UL-CSA

Universal Utility Meter

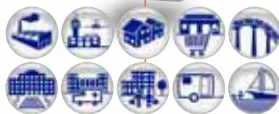


G3420/29/30...

MAIN FEATURES

- G3420... Digital input module for external supply with optoisolated inputs. No. of channels: 8
- G3429... Universal analog input module for external supply. No. of channels: selectable
- G3430... Digital output module for external supply with isolated inputs. No. of channels: 1, 2, 4, 8

Digital/Analog I/O Modules

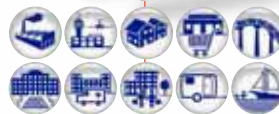


G4420...

MAIN FEATURES

- Digital input module for counting of pulses from energy meters, item detectors etc.
- No. of channels: 4
- Power supply: 230 = 230 VAC
724 = 15-30 VDC
- Degree of protection IP20

Digital Input Module



SOFTWARE

MAIN FEATURES

- WATTSOFT2 - WATTSOFT3
WM4SOFT - PQTSOFT
Energy Management Software
- DUPDATAACC
Dupline product Software
- SPECVIEW - SCADA
INTELLUTION
Monitoring product Software

Energy Management Dupline Software

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Belluno - **ITALY**

Carlo Gavazzi Controls SpA
Sensors Division
Castel Maggiore (BO) - **ITALY**

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