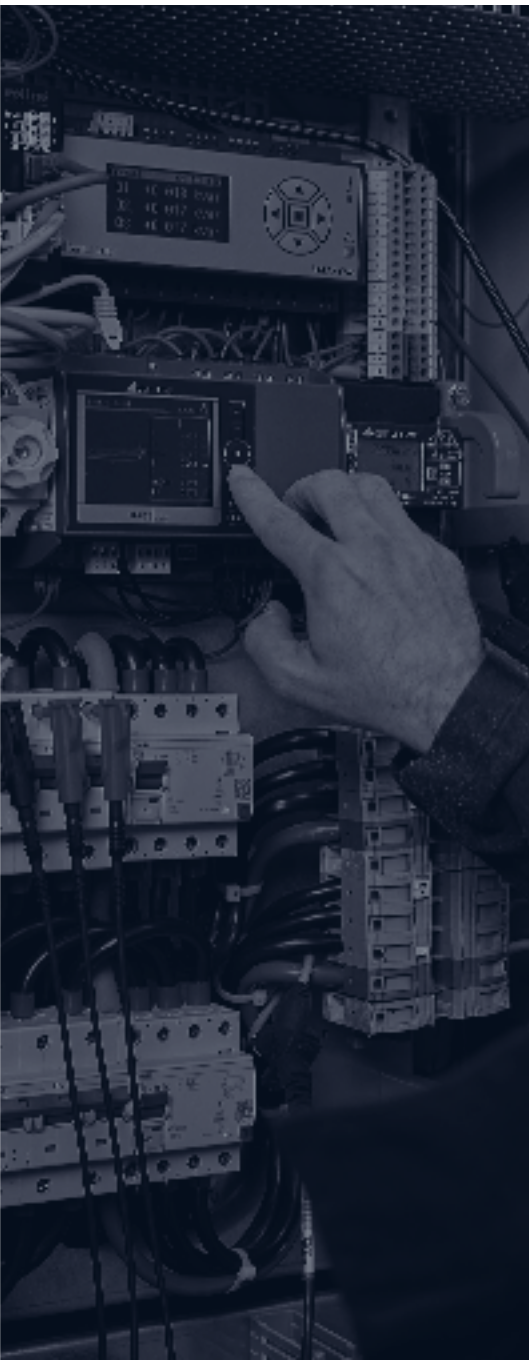


ENERGY AND POWER QUALITY DATA LOGGER

POWER QUALITY IN MINIATURE FORMAT



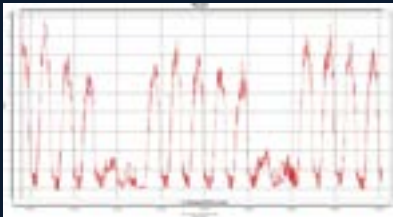
MAVOWATT | 210
POWER ANALYSER



MAVOWATT | 210

POWER ANALYSER

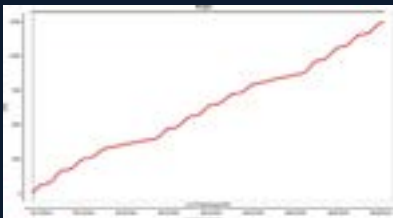
DRAN-VIEW XP SOFTWARE



Load Trends



Voltage Trends



Energy Trends



View PQ Events

LOW COST PORTABLE ENERGY/POWER LOGGER & PQ DETECTOR

- Power/energy logger & PQ disturbance/event detector
- 3+1 voltage channels – Direct measurements up to 600 Vrms, CAT III
- 4 current channels – compatible with MAVOWATT 210 Rogowski and 333 mV split-core current transformers
- Measures: V, I, W (P), VA (S), VAR (Q), Power Factor, Demand, Energy & much more
- PQ disturbance detector – Detects and records trends of RMS sags/dips, swells, current changes – **IEC 61000-4-30 1/2 cycle methods**
- Measurement and recording of Vthd and Ithd using the methods of IEEE 519-2014/IEC 61000-4-7 standards
- Web browser interface for real time meters, setup and data transfer
- Free, unlicensed Dran-View XP software for analysis & reporting
- **7 hours battery runtime – Best in class**
- **Automatic wiring verification – LEDs indicate wiring errors**
- Ethernet, USB communications
- Modbus, BACnet
- 3 Years Warranty

3 VOLTAGE CHANNELS



4 CURRENT CHANNELS

COLOR CONNECTION LED'S

- Easily identify wiring errors
- Color coded to your wiring
- Correct for wiring errors



SMALL AND COMPACT



3+1 VOLTAGE, 4 CURRENT CHANNELS



ETHERNET & USB

APPLICATIONS

MAVOWATT 210 IS USER FRIENDLY IN VIRTUALLY ANY LOCAL OR REMOTE POWER MONITORING APPLICATION, INCLUDING:

- Energy audits according to DIN EN 16247-1
- Energy flow detection
- Power management
- Basic PQ surveys
- Check metering
- Sub metering
- Load profiling
- Power factor studies
- Residential applications including energy consumption and PQ detection

INDUSTRIES INCLUDE, BUT ARE NOT LIMITED TO:

- Utility
- Commercial
- Industrial
- Manufacturing
- Electrical contractors
- Property management & real estate
- Petrochemical & Chemical
- Hospital & healthcare
- Oil exploration

TECHNICAL DATA

GENERAL

- Sampling Frequency: 32 ksps (recorded and real-time meters), 128 samples per cycle (periodic waveform snapshots)
- Sag/dip, swell trigger resolution: 1 cycle (uses IEC 61000-4-30 Class S methods)
- Panel indicators: RGB LEDs for monitoring on/off, energy flow, PQ event indication, battery charging/status, wiring status
- Storage Capacity: 8 GB

VOLTAGE (3)

- Range: 90 to 600 Vrms CAT III
- Accuracy: 90 Vrms to 600 Vrms = $\pm 0.1\%$, <90 Vrms = 0.5%
- Connections: 4 safety banana voltage inputs – 3 phase voltage and 1 neutral/reference

CURRENT (4)

- Input: 0.333 VRMS full scale, Connections: BNC
- Accuracy: $\pm 0.1\%$ + probe

FREQUENCY

- Range: 50 Hz = 45 Hz to 55 Hz, 60 Hz = 55 Hz to 65 Hz
- Accuracy: 50/60 Hz: ± 0.001 Hz

POWER QUALITY

- Sag/dip, swell trigger threshold resolution: 1 cycle
- Vthd: $\pm 5\%$ for $V \geq 10\% V_{nom}$
- Ithd: $\pm 5\%$ for $I \geq 10\% I_{nom}$ + probe error

ENERGY PARAMETERS (Probe Dependent)

- Active Energy (P): 0.1%
- Reactive Energy (Q): 0.1%
- Apparent Energy (S): 0.1%
- Fundamental Active Energy(P): 0.2%
- Fundamental Reactive Energy(Q): 0.2%
- Fundamental Apparent Energy (S): 0.2%
- Demand: 0.2%

POWER PARAMETERS (Probe Dependent)

- Active Power (P): 0.2%
- Reactive Power (Q): 0.2%
- Apparent Power (S): 0.2%
- Fundamental Active Power (P): 0.2%
- Fundamental Reactive Power (Q): 0.2%
- Fundamental Apparent Power (S): 0.2%
- Power Factor (PF): $\pm 0.001\%$

INSTRUMENT POWER

LINE POWER SUPPLY

- Range: 90 to 264 VAC, 47 to 63 Hz, Consumption: 15 W max.
- Line cords/plugs: EU

INTERNAL BATTERY

- Rechargeable lithium ion battery pack
- Run time: 7 hours (typical), Charge time: 15 hours (typical)

COMMUNICATION INTERFACES

- Ethernet: 10 Mbit/s
- USB: 2.0
- Protocols: Modbus, Bacnet

ENCLOSURE & MECHANICAL

MECHANICAL

- Weight: 1.4 lb. (0.64 kg)
- Dimensions: 3.5" W x 2.2" H x 7.4" L (6.4 cm x 8.9 cm x 18.8 cm)
- IP50 (vertical position)

ENVIRONMENTAL

- Storage Temperature: 5° to 131°F (-15° to $+55^\circ\text{C}$)
- Operating Temperature: 32° to 113°F (0° to $+45^\circ\text{C}$)
- Humidity: 5% to 95% non-condensing



ORDERING INFORMATION

Article number: M840B

- Highly accurate, 3-phase MAVOWATT 210 data logger for energy and power quality including hard and softcase
- Dran-View XP software
- Voltage leads as well as (3) Rogowski current transformers, 50-500 A, probe length 40 cm



GMC INSTRUMENTS

 **GOSSEN METRAWATT**
 **CAMILLE BAUER**

 
R04-RevA

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