

ENERGY AND POWER DISTURBANCE ANALYZER

SAFE, INTUITIVE AND FLEXIBLE ANALYSIS
OF POWER QUALITY, AS WELL AS POWER
AND ENERGY DEMAND





Portable instruments for comprehensive power quality, energy and demand measurements in 1000 V CAT III and 600 V CAT IV applications



APPLICATIONS

POWER QUALITY – ALWAYS ON THE SAFE SIDE WITH CLEAN ELECTRICAL NETWORKS

The new power analyzers included in the MAVOWATT product range are used for monitoring, analysis and recording of mains quantities in public power supply systems and industrial applications.

During further development of the MAVOWATT series, great importance was placed on extremely safe operation, diverse communication options, numerous recording and report generating functions and increased measuring resolution with higher sampling rates.

MAVOWATT power disturbance analyzers have been subdivided into four different performance classes. From the inexpensive all-rounder right

on up to the high-end instrument, you get a solution which is ideally matched to your measuring task.

With the help of these innovative products, all relevant measured quantities can be acquired which are decisive for the quality of electrical supply power. Disturbances and events can be easily pinpointed, documented and analyzed with reference to applicable standards – the perfect foundation for sustainable optimization.

TECHNICAL DATA

THE INSTRUMENTS FULFILL ALL REQUIREMENTS SPECIFIED IN THE IEC 61000-4-30 MEASURING INSTRUMENT STANDARD FOR “CLASS A” INSTRUMENTS

MAVOWATT 230

- All functions and measurements: class A (4U / 4I)
- Load profile analyses and energy measurements
- Voltage quality per EN 50160 including report function
- Acquisition of transients: 512 values per cycle
- Two frequency bands: 16⅔ and 50 / 60 Hz
- Events recording: RMS and waveform
- Pre/post trigger: max. 100 cycles
- Snapshot function
- USB and Ethernet
- Time synchronization via GPS clock (optional)

MAVOWATT 240

- All functions like Mavowatt 230 and additionally
- Answer Modules
 - Ripple control signal recording
 - Expanded detail time window for events with up to 10,000 cycles
 - Bluetooth
 - WiFi

MAVOWATT 270

- All functions like Mavowatt 240 and additionally
- 1 MHz sampling rate for transients of up to 2000 V_{PEAK}

MAVOWATT 270 – 400

- All functions like Mavowatt 270 and additionally
- Expanded frequency band for 400 Hz applications

DRANVIEW 7

THE INDUSTRY’S LEADING POWER ANALYSIS SOFTWARE – SIMPLE, USER-FRIENDLY, HIGH-PERFORMANCE

ANALYSIS

CALCULATION

DOCUMENTATION

- Intuitive operation including modern user interface with Office look and customizable toolbars
- Extremely high performance: fast processing of large amounts of data thanks to 64-bit support
- Individualized, automatic reports for professional documentation
- Mathematical calculation options for various measured value recordings, e.g. leakage current or difference

- Multi-site analysis, calculation and documentation of up to 16 simultaneous data records from various devices
- Cross-manufacturer application options thanks to support for PQDIF, Comtrade, CSV and other data formats
- Rescue kit for repairing your measurement data (time stamp, polarity reversal) without renewed recording of measured values

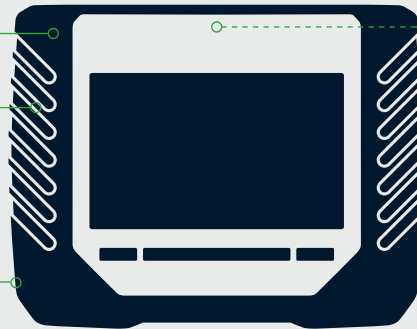


RUGGED HOUSING

- Cushioned
- Insulating rubber holster
- Handy and easy to hold

COMMUNICATIONS INTERFACES

- Ethernet
- USB ports
- Available with WiFi and Bluetooth

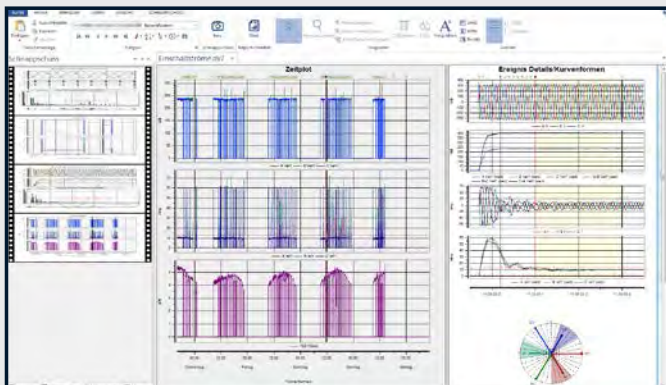


PRECISION

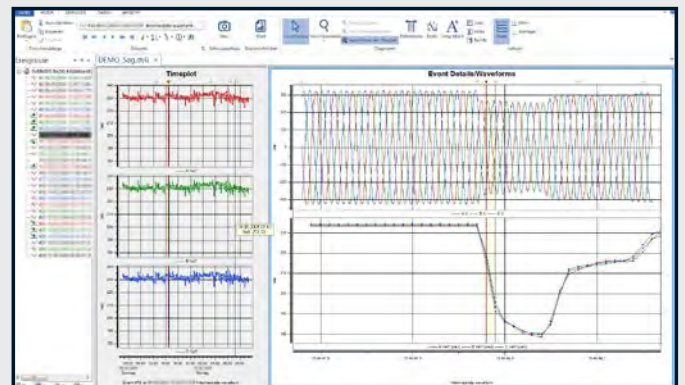
- 8 channels
- Flexible probes with power supply from the analyzer
- High-precision monitoring of mains quality and energy status

USER INTERFACE

- 7" WVGA color touch-screen



Inrush Current Measurement



Disturbance Acquisition with Detail View

SAFE

1000 V CAT III / 600 V CAT IV for safe work within the public system as well as for measurements in industrial environments with up to 1000 V_{RMS} AC/DC

Wireless remote access ensures hazard-free work and configuration in safety-critical environments

Meets the latest industrial standards and permits legally secure recording and documentation in accordance with:

- EN 50160 Voltage characteristics of electricity supplied by public distribution networks
- IEC 61000-4-30 class A (edition2) Power quality measurement methods
- IEC 61000-4-7 General guide on harmonics and interharmonics measurements
- IEC 61000-4-15 Flickermeter – Functional and design specifications

INTUITIVE

Huge 7" color touch-display for convenient on-site operation, configuration and analysis

Automatic setup: The instrument automatically detects the type of connection as well as nominal values for voltage, current and frequency, thus permitting quick device configuration – even without previous knowledge or training on the instrument.

The PQ and energy dashboard with real-time warnings and red-green display provides you with a quick overview in just a matter of seconds during measurement.

AnswerModules®: Intelligent algorithms support you during troubleshooting and diagnosis, and offer direct information regarding the sources of any detected interference.

FLEXIBLE

8 differential inputs (4 U/4 I) permit precise and flexible acquisition of measured values in wye and delta systems – even downstream from frequency converters – or simultaneous, direct measurement of AC and DC signals of up to 1000 V_{RMS}.



Transient voltage and current acquisition with sampling rates of up to 1 MHz and 2000 V_{PEAK}

Various frequency bands for worldwide use in systems with 16⅔, 50 and 60 Hz, or optionally in 400 Hz systems as well

GPS receiver input for time synchronization

Ethernet, WiFi, Bluetooth and USB for data transmission and remote access via smartphone, tablet, PC and MAC

GMC INSTRUMENTS

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Brief, animated report on
the most important functions
and possible applications via
this QR code:

