GOSSEN METRAWATT

MAVOSYS 10 - Standard and 19" Version Modular System for Power Quality, Demand & Energy Monitoring

THE INTELLIGENT INSTRUMENT

True to its three decade legacy as the industry leader in power quality analysis, GOSSEN-METRAWATT proudly introduces MAVOSYS 10 Series, the next generation of permanent monitoring system for power quality, energy and demand, and process monitoring. MAVOSYS 10 family of DataNode's have a configurable design that allows users to specify the right instrument configuration for their specific application. All this flexibility in one instrument, combined with the multi-user web interface of Encore Series Software and available local ¼ VGA color touch screen display, truly make MAVOSYS 10 Series the right product for your application.

MAVOSYS 10 shown as standard device and available rack mount with and without ¼ VGA color touch display

GROUNDBREAKING INNOVATION

MAVOSYS 10 DataNode's are the first truly modular and configurable instruments to shatter the traditional 8-channel (4 voltage/4 current) instrument format. Now you can have your choice of (4 channel) voltage, (4 channel) current and (8 channel) digital input modules. You will save money, prevent integration aggravation and gain physical space by combining up to four modules in one instrument for applications that previously required two or more instruments. Popular combinations are:

- 8 channel traditional power and PQ monitoring:
  1 Voltage & 1 Current module
- 16 channel equipment performance (I/O) monitoring:
  2 Voltage & 2 Current modules
- 16 channel substation feeder monitoring:
  1 Voltage & 3 current modules

The MAVOSYS 10 DataNode enables you to combine modules in software to build your own instrument with up to four virtual analyzers. Virtual analyzers are either individual modules working as independent analyzers or combinations of modules such as when combining Voltage & Current modules to create a power quality, demand & energy analyzer.

COMPLIANCE

MAVOSYS 10 Series is perfect for ongoing monitoring to determine compliance with world-wide standards such as EN50160 and your own specialized compliance requirements. Encore Series voltage modules are certified by an independent laboratory for Class A compliance with IEC61000-4-30. You can be confident that MAVOSYS 10 Series measurements are accurate and repeatable and that they meet the most stringent requirements.

MAVOSYS 10 FAMILY DATANODES

Available in both standard and switchgear mount enclosures, the MAVOSYS 10 family of DataNode's can be used in a wide variety of applications. The standard enclosure (61STD) is a stand alone instrument available with a rack mount (with or without ¼ VGA touch display), wall mounting brackets and weather resistant enclosures to meet the most severe operating environments. The switchgear version is available with a ¼ VGA color touch display (61SGD) or without display (61SG).

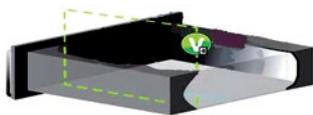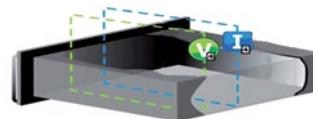Choose the appropriate mainframe then add the modules that meet your application.

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Modular System for
Power Quality, Demand & Energy Monitoring

Voltage Compliance

Std Power Quality
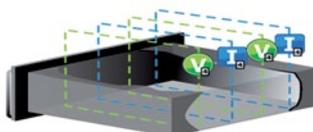
4 Ch. Voltage Module
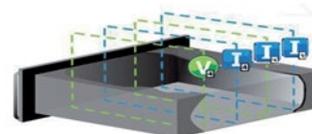
UPS Performance

4 Ch. Current

8 Ch. Digital Input Module

Substation Feeder

MAVOSYS 10 Family DataNode's modular design enables you to build the right instrument for your application.

MAVOSYS 10 SPECIFICATIONS

MODULES - CHOOSE UP TO FOUR

VOLTAGE
- Channels: (4) differential inputs, AC/DC
- Sampling: 512 samples/cycle, 16bit A/D, synchronous sampling
- Range: 1-600 Vrms, +/- 1000VPK, Frequency: 16/20Hz, 50Hz, 60Hz
- Full Scale Accuracy: 0-600V 0.1% reading +/- 0.05% full scale, 7KHz bandwidth for low/medium frequency transients. 100-300V AC 0.1% reading for IEC61000-4-30
- Input impedance: 10M Ohm to ground
- Choice of connections: Screw terminals (M819G), safety connectors (M819H), D connector (M819I) for use with (optional) remote pod with screw terminals (M819K).

CURRENT
- Channels: (4) differential inputs, AC/DC
- Sampling 512 samples/cycle, 16 bit A/D.
- Range: Full scale current = 1.5Vrms, crest factor of 3
- Accuracy: 0.1% reading +/- 0.05% full scale, 3KHz bandwidth for low/medium freq. transients. Does not include CT.
- Choice of connections: Screw terminals 1A (M819L) or 5A (M819M), TR connectors (M819N), D connector (M819I) for use with (optional) remote 1A 5 fold overload (M819P) or 5A 5 fold overload (M819Q) or 5A 20 fold overload (M819O).

DIGITAL INPUT
- Chanels: (8), Range: 0 – 135VAC/DC,
- 1KHZ sampling, Edge or level triggered,
- Logic programmed by user (active high or active low)
- Time stamped to the millisecond
- Screw terminals (M819S)

MEMORY
- 1GB internal flash

MONITORING COMPLIANCE
- IEC61000-4-30 Class A, IEC61000-4-7, IEC61000-4-15
- EN50160, NVE, IEEE1159, IEEE1453, IEEE519, IEEE1459

COMMUNICATIONS
- Standard: RJ45 TCP/IP Ethernet, RS232/RS485
- Optional: GSM/GPRS modem (Z819D), analog modem
- Protocols: XML, Modbus TCP/RTU
- Time synchronization: NTP, optional internal GPS (M819D)

INSTRUMENT POWER
- Standard: 12VDE input, external power supply 90-264 V AC 50/60 Hz - Euro, US, UK power cord available
- Optional: external power supply 125V DC, 220V DC
- 15 minute internal UPS (specified with display & 4 modules)

AVAILABLE ENCLOSURES
- M819A (61STD): 10,2cm x 28cm x 20,3cm, weight 1,9kg
- M819V (61RMTS): 19" Rack mount without display
- M819U (61RMTD): 19" Rack mount with ¼ VGA toutchdisplay, 12 languages
- M819W (61WENCL) weather resistant cabinet
- M819G (61BRKTS) wall mount brackets

ENVIRONMENTAL
- Operating temperature: -10 to 60˚C
- Humidity: 10 to 95%, non-condensing, Indoor use only

SAFETY
- CE, ISO9001

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