61SG, 61SGD Switchgear Mount DataNode®

Power Quality, Demand & Energy Monitoring

Available with or without a color display, the 61SG/61SGD panel mount design is ideal for switchgear applications

THE INTELLIGENT INSTRUMENT

True to its three decade legacy as the industry leader in power quality analysis, Dranetz-BMI proudly introduces Encore® Series, the next generation of permanent monitoring system for power quality, energy and demand, and process monitoring . Encore® Series 61000 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 Encore® Series the right product for your application.

GROUNDBREAKING INNOVATION

Encore® Series 61000 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 61000 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

Encore® 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 Encore® Series measurements are accurate and repeatable and that they meet the most stringent requirements.

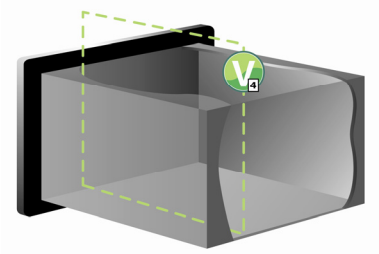
61000 FAMILY DATANODE'S

Available in both standard and switchgear mount enclosures, the 61000 family of DataNode's can be used in a wide variety of applications. Choose the appropriate mainframe then add the modules that meet your application. The switchgear version is available with a ¼ VGA color touch display (61SGD) or without display (61SG). 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.

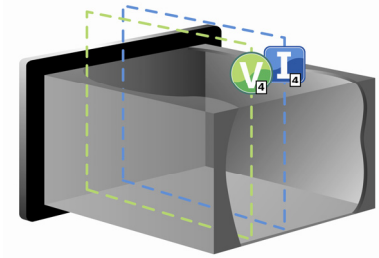
ENCORE SERIES

61000 SYSTEM

Voltage Compliance



Std Power Quality

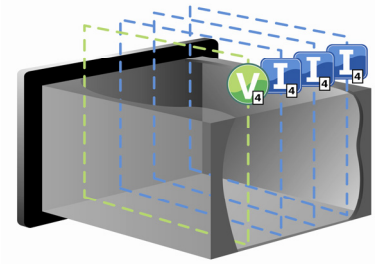


4 Ch. Voltage Module

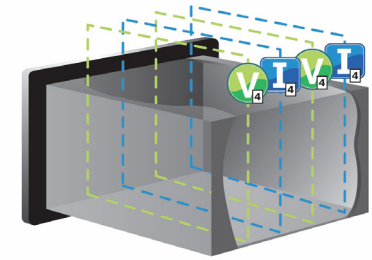
4 Ch. Current

8 Ch. Digital Input Module

Substation Feeder



UPS Performance



61000 Family DataNode's modular design enables you to build the right instrument for your application.

61SG/61SGD DATANODE® 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: 10MΩ to ground
• Choice of connections: Screw terminals (61MVS), safety connectors (61MVB), D connector (61MZP) for use with (optional) remote pod with screw terminals. Choose one

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 (61MAS5,1), TR connectors (61MAC), D connector (61MZP) for use with (optional) remote 5A or 1A pod. Choose one

DIGITAL INPUT
• 61MDIN: 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

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, analog modem
• Protocols: XML, Modbus TCP/RTU
• Time synchronization: NTP, optional internal GPS

INSTRUMENT POWER
• Standard: 90 to 250V AC 50/60Hz, 105 to 125VDC
• Optional: 90 to 250V AC/DC, 50/60Hz
• Screw terminals
• 15 minute internal UPS (specified with display & 4 modules)

AVAILABLE ENCLOSURES
• Panel Mount, 186mm x 186mm cutout
• 61SGD: with ¼ VGA color touch display, 12 languages
• 61SG: without display
• 61RMTSG: rack mount

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

SAFETY AND COMPLIANCE
CE, ISO9001

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