

DataNodes™

EPQ series



A clear and open window to Enhanced Power Quality, energy, and more.

Dranetz-BMI Series 5510/20/30 Enhanced PQ DataNodes throw open the power information window. At last, you'll see the whole picture.

Just because your old "power quality" meter missed the event that crashed your process doesn't mean it didn't happen. Choose the EPQ DataNodes. They give you the complete window into the power at your data center, substation, service entrance, or manufacturing process.

Start by choosing revenue-accurate CTs for energy management, or 20X overcurrent capacity for fault currents in substations. Then install your EPQ DataNode. Just connect up your voltages and currents, plug in your Ethernet network, and your self-discoverable EPQ DataNode will quickly connect to its InfoNode. Together, they will sort out timing and data transfer on their own. The InfoNode will even update the EPQ's DataNode firmware if needed.

And you set up your EPQ DataNode from your favorite web browser -- there's no software to install or learn.

Your EPQ DataNode collects 384 samples per cycle per channel, using advanced data acquisition and synchronization techniques. Damaging microsecond transients are peak-hold-captured. RMS values update every half cycle, along with the min/avg/max values. Choose triggering based on absolute values or a floating nominal and equipment

susceptibility levels. And the Dranetz-BMI patented waveshape trigger algorithm, coupled with the "smart transient" algorithms for voltage and current, ensure that all critical information is captured.

Harmonic and interharmonic calculations comply with IEC standard 200-millisecond



Only the state-of-the-art EPQ DataNodes have microsecond transient capture, a UPS for those long sags and interruptions, data compression algorithms coupled to a large memory space, enhanced cross triggering, and web browser/ethernet access.

windows, including the fundamental phase angles and distortion levels. All of these, plus power and energy calculations, come complete with trends and statistical analysis.

To better see cause and effect, you can save 16 pre/post cycles of waveforms per event. For long events, such as sustained interruptions, advanced data compression techniques optimize memory usage while operating from the internal UPS of the monitor.

Choose the EPQ DataNodes when you need clear and complete power information. There's nothing better.

Specifications for the 5510/5520/5530 DataNodes

Configurations: Internal/external CT's and voltage pods; 1A/5A current; 5x or 20x overcurrent. See Configuration Guide for other choices and selections.

Measurements: 160 parameters including true 1/2 cycle RMS, sags & swells, interruptions, microsecond transients, kVA, kW, PF, frequency, kVAR, kWh, kVAh, kVARh, predicted demand, K-factor, TIF, THD, individual harmonics through 50th. 45-65 Hz phase locked sampling. Up to 16 pre/trigger/post cycles.

Voltages: 4 channels, accuracy $\pm 0.2\%$, 384 samples/cycle plus 1 microsecond peak capture.

Currents: 4 channels (5 Arms / 1 Arms), 3x / 20x peak, accuracy $\pm 0.2\%$, 384 samples/cycle plus 1 microsecond peak capture.

Triggers: RMS variations, waveshape, relative and absolute voltage and current triggers,

sensitivity changes, cold load pickup, limit crossings (v.hi, hi, lo, v.lo), harmonics, and more.



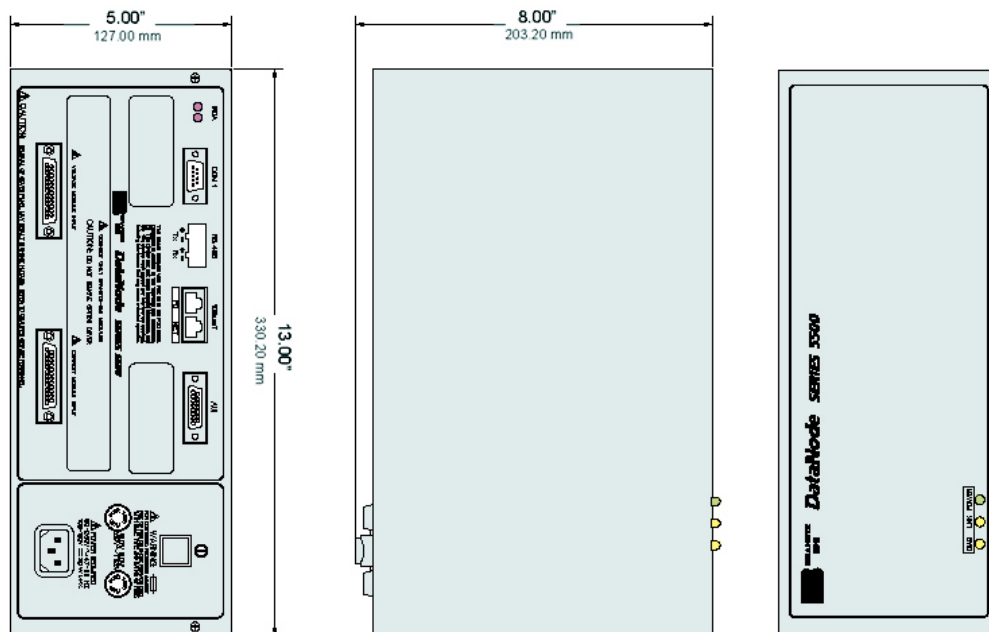
Instrument power: 90-250 Vac, or 105-150Vdc, 50/60Hz, 10VA. Built-in UPS with 4-year life-cycle battery.

Enclosure/Environment: Rack, panel, desktop, NEMA 4x options. 0° - 60° C standard, -20° - 70° C optional enclosure. A variety of mounting options are available.

Communication: 10BaseT ethernet to InfoNode; RS-485; AUI fiber-optic. UCA-2. InfoNode access through Internet, Intranet, Ethernet, dial-up telephone line.

Additional features: Cross-triggering, absolute 10ms time accuracy w/ optional GPS, remote firmware updating.

Certifications and design standards: Optional revenue meter certification to ANSI C12.1, CE, ISO9001, EMC Directive (89/336/EEC), IEC 61000-4, EN61010-1 (1993), EN61010-1/A2



5530 version

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