



# Northbrook News

## Supplying Instrumentation and Process Controls to Industry

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### Links to more information

**Find out more about Northbrook's extensive product lines:**

<http://northbrookint.ca/products.php>

### Contact Us

<http://www.northbrookint.ca>  
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### Northbrook International Controls Inc.

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## Northbrook International Controls

Northbrook International Controls Inc. was formed in September 2005 to supply instrumentation and process controls to industry. Northbrook represents quality North American and European manufacturers. As needs and new technology present themselves, Northbrook will be on the cutting edge of the latest and most innovative instrumentation available.

We also supply and support secure Scada and Process control software.

Located in Vancouver, British Columbia, Northbrook Controls is strategically positioned to offer maximum support for all its products.

Our company personnel have collectively over 60 years experience in the industry. The company president, Stan O'Keeffe, has managed several highly successful instrumentation companies.

For further information about our company and the products we offer please contact us and we will be happy to discuss your particular needs and requirements.

## Power Monitors Inc.

### The Quality in Power Quality

**P**ower Monitors, Inc. is an industry-leading product design and manufacturing firm based in Mt. Crawford, Virginia.

We specialize in applying advanced technologies to develop state-of-the-art power quality recording solutions for residential, commercial, retail, institutional, industrial, and substation applications. Since 1987 we have helped electrical utilities and their customers to identify and address a wide array of power quality concerns. We pride ourselves in delivering leading-edge recorders and software that are as easy to use as they are affordable. Our 24/7 technical support is consistently rated "best in the business." We welcome this opportunity to introduce our company and its products to you.

PMI strives to solve power quality problems by listening to our customers and working with them to design and manufacture products. Total customer satisfaction is the primary goal of all PMI staff. We are always available to discuss how PMI can help you meet your power monitoring needs. Please browse our site to learn more about PMI and how we can help meet your Power Monitoring needs.

## Eagle 440:

### Compact Wireless Power Quality Recorder



Welcome to the wireless revolution in power quality (PQ) recorder technology. Eagle PQ Wireless™ recorders are the first digital recorders to monitor real-time PQ data and download it remotely. Measuring just 5 3/8" L x 2 3/8" W x 1 13/16" H, and weighing less than 1 lb. each, Eagle™ recorders outperform bigger, bulkier, and more expensive monitors in a wide range of portable PQ monitoring applications.

These rugged, all-weather, wireless recorders go where other recorders do not go and transmit PQ data in a way other recorders cannot. Eagle PQ Wireless™ recorders incorporate state-of-the-art Bluetooth® technology to monitor PQ data and remotely download it to selected Palm® PDA's or Bluetooth®-equipped laptops. With an Eagle™ recorder, PQ data being recorded behind a locked security fence, in a transformer buried underground, or from restricted areas where distribution voltages pose a safety hazard to crews, is instantly accessed.

Eagle™'s generous 4MB of memory also means you can store PQ data for up to two years, and then download it for detailed analysis as needed. You can also download the Eagle™ using a standard USB connection to your PC

The 440 Series features four sets of voltage and current inputs for advanced 1-, 2-, and 3-phase applications, as well as neutral-to-ground applications.

#### Real-time Harmonics and Waveforms

Eagle PQ Wireless™ recorders calculate and display waveforms and harmonic values for triggered events on all monitored channels. Users may then display and download them in real-time via wireless or USB cable.

Specifications	
<b>Inputs</b>	
AC Voltage	0 to 600 VAC
AC Current	0 - 5000 amps
Sample Rate	15,360 samples per second/channel 256 samples per cycle
<b>Channels</b>	
Voltage	2, 3, or 4 channels
Current	2, 3, or 4 channels
<b>Measured Quantities Per Cycle</b>	
RMS Voltage	Volts
RMS Current	Amps
Real Power	Watts

Apparent Power	VAs
Reactive Power	VARs
Phase Angle	Degrees
Power Factor	Watts/VA
Displacement PF	cos(phase angle)
Power Usage	kWh, kVARh, kVAh
<b>Harmonics</b>	
Voltage	to the 51st
Current	to the 51st
Measurements	magnitude, phase, and THD
Waveform Capture	Triggered (value set by operator)
<b>Communications</b>	
Type, Standards	Bluetooth® Wireless technology USB
<b>Information Storage</b>	
RAM	128K
FLASH EPROM	8MB
DSP Waveform RAM	up to 256K
TOTAL MEMORY	2.2 million readings
<b>Record Settings</b>	
Stripchart settings	1 cycle to 4 hours
Significant change	1V to 8V, in 1V steps
Flicker settings	User-defined or standard
<b>Power Supply Requirements</b>	
Voltage	60-600VA Chan 1 to COM (47-63Hz)
Power Consumption	1.5 Watts max, 9VA max at 600VAC
<b>Environmental</b>	
Operating Temperature	-30C to +55C (-22°F to 131°F)
Relative Humidity	less than or equal to 85%
Shock	60Hz to 2KHz, acceleration 25G
Vibration	10Hz to 60 Hz, amplitude 1.8mm
Max Altitude	1.0km (6560 ft)
Case Protection	IP65
<b>Safety</b>	
Standards	UL 61010B-1, IEC 61010-1, 600V CAT III Pollution Degree 2 UL File No E249166
<b>Power Fail Operation</b>	
The device operates with no input voltage for more than 2 hours.	

This allows it to measure down to 0 volts on all channels during power outage periods.

***Physical Dimensions***

Size	5.40" L x 3.00 " W x 1.25" H
Weight	less than 1 lb.
Case	NEMA 4X