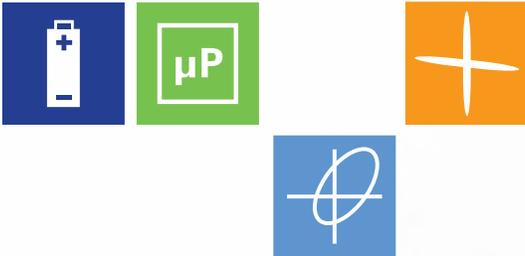


# CompassPoint V2Xe

2-axis digital compass module

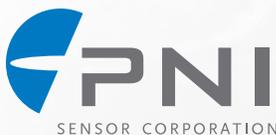


## A TURNKEY COMPASS FOR EVERY BUDGET.



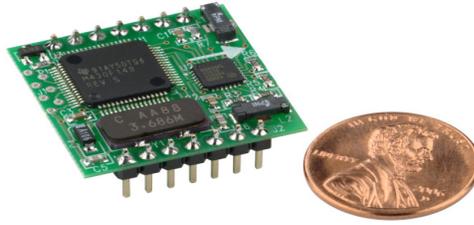
A LOW-COST, LOW-POWER CONSUMPTION 2-AXIS COMPASS module, PNI's CompassPoint™ V2Xe features an onboard microprocessor for true plug-and-play compassing and magnetic field sensing functionality in seismic monitoring, wind direction sensing, and robotics applications.

The CompassPoint V2Xe provides all-digital compass heading outputs accurate to 1 degree, can be calibrated to account for local magnetic fields, and includes non-volatile memory that retains accurate calibration even when powered down. The V2Xe eliminates the time and expense of building a compass from scratch, making it a perfect solution for high-volume electronics applications as well as robotics and engineering.



## Turnkey 2-axis compass...

With low power consumption, high signal/noise immunity under all conditions, and software-configurable resolution and field measurement range, the CompassPoint V2Xe is the perfect solution for adding compass heading functionality to virtually any application – from hobbyist projects and consumer electronics prototypes to high-performance solid-state navigation and magnetic field sensing equipment.



## ...for every budget.

CompassPoint V2Xe allows designers to bypass the time and expense required to build a 2-axis digital compass from scratch. Advantages include 3 V operation for compatibility with new systems, low power consumption, a small footprint, large signal noise immunity under all conditions, and a large magnetic field dynamic range. Resolution and field measurement range are software configurable for a variety of applications. The measurement is very stable over temperature and inherently free from offset drift. These advantages make PNI 's V2Xe the choice for compassing applications that require a high degree of azimuth accuracy, low power consumption, and/or a small package size.

## Specifications

Performance Specifications	Heading	Accuracy	1.0° rms
		Resolution	0.01°
		Repeatability	0.05 rms
	Magnetometers	Magnetic Resolution	0.015° μT
I/O Characteristics	Maximum Sample Rate		8 samples/sec
	Communication Interface		SPI
Mechanical Characteristics	Dimensions (l x w x h)		25.4 x 25.4 x 11.55 mm
	Weight		3 gm
Power Requirements	Supply Voltage		3.0 VDC
	Current Draw (continuous)		2.0 mA
	Current Draw (sleep mode)		0.2 mA
Temperature Range	Operation		-20 °C to +70 °C
	Storage		-40 °C to +85 °C

**For ordering information and most current specifications, please visit [www.pnicorp.com](http://www.pnicorp.com)**

PNI Sensor Corporation 133 Aviation Blvd, Suite 101, Santa Rosa, CA 95403-1084 USA  
Phone: 707-566-2260 Fax: 707-566-2261

## CompassPoint V2Xe

2-axis digital compassing module



2-AXIS



LOW POWER



HARD AND SOFT IRON CORRECTION



INTEGRATED PROCESSOR

PNI SENSOR CORPORATION is America's leader in the exacting science of turning information from the Earth's magnetic field into usable orientation data. Building on decades of patented knowledge of magnetic fields and their anomalies, PNI offers today's most reliable magnetic sensors, including both 2 and 3 axis compasses and other advanced sensor systems. Highly sensitive and finely tuned, PNI offers a range of sensors to meet varying price, accuracy and footprint size needs.

Serving a demanding, wide-ranging list of industries and applications, PNI's U.S. based team of physicists, engineers, researchers and quality control experts can help speed your time to market and ensure marketplace success. Nimble and responsive, PNI offers a multitude of sensors to meet today's growing technology needs.

