TargetPoint TCM
Gyro-stabilized Digital Magnetic Compass

Accurate heading in any environment

TargetPoint TCM incorporates magnetometers, accelerometers and gyroscopes for unmatched performance in real-world conditions.

TargetPoint TCM combines PNI's high sensitivity Magneto-Inductive sensors with the latest high stability 3-axis MEMS accelerometer and 3-axis MEMS gyroscopes providing accurate orientation while in motion and in magnetically challenging environments. TargetPoint TCM excels in conditions that cause errors in traditional digital magnetic compasses.

It uses advanced magnetic distortion compensation and calibration scoring algorithms to counter the effects of hard and soft iron interference, providing highly accurate heading information in almost any environment and orientation.

Features & Benefits

- Patented magnetic anomaly rejection algorithms eliminate errors due to magnetic distortion, even in magnetically harsh environments

- Gyro-stabilized compass for dynamic accuracy of sub-0.5 degrees of heading accuracy

- Multiple calibration methods are available to ensure ease of calibration for all applications

- ITAR-free

Specifications*

Heading	Accuracy	0.3° rms
	Repeatability	0.05° rms
	Resolution	0.1°
Tilt	Range	±90° of pitch ±180° of roll
	Accuracy	0.2° rms
	Repeatability	0.05° rms
	Resolution	0.01°
I/O Characteristics	Communication Interface	Asynchronous serial, TTL compliant, 5V tolerant
Mechanical Characteristics	Dimensions *(l x w x h)*	33 x 31 x 13.8 mm
Power Requirements	Supply Voltage (unregulated)	3.7 – 9 VDC
	Typical Current draw	17mA
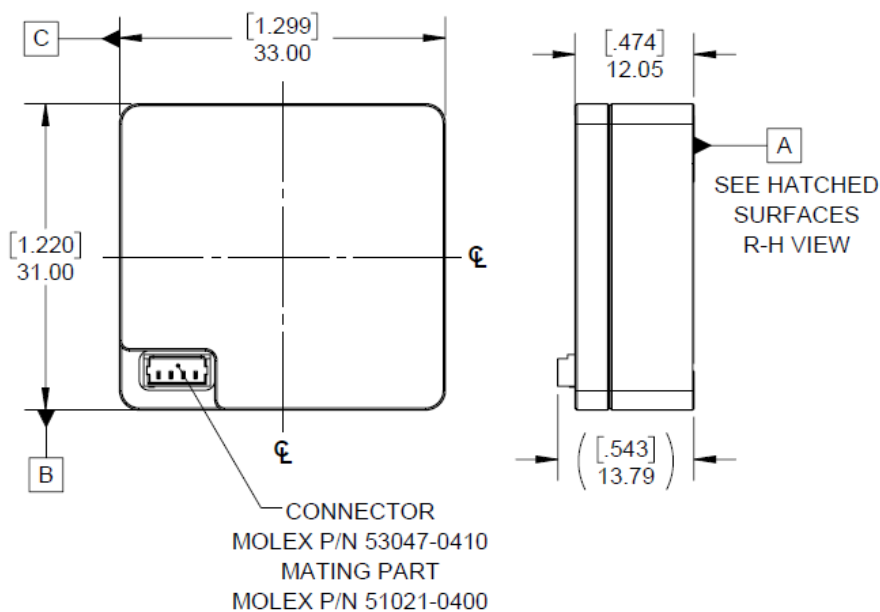
With over 30 years of experience, PNI is the world's foremost expert in precision location, motion tracking, and fusion of sensor systems into real-world applications.

PNI's sensors and algorithms serve as the cornerstone of successful IoT projects and other mission-critical applications where pinpoint location, accuracy, and low power consumption are essential.

Building on decades of patented sensor and algorithm development, PNI offers the industry's highest-performance geomagnetic sensor in its class, location and motion coprocessors, high-performance modules, sensor fusion algorithms, and complete sensor systems.

To learn more, please visit www.pnicorp.com.

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CONNECTOR
MOLEX P/N 53047-0410
MATING PART
MOLEX P/N 51021-0400

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PNI Sensor
2331 Circadian Way
Santa Rosa, CA 95407 USA
Phone: +1 707 566 2260