

SeaTRAX-85°

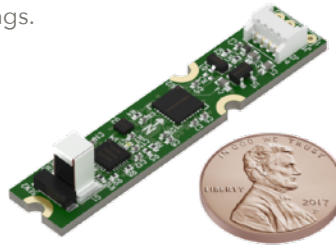


Only **one** towed array heading sensor is made for these latitude **extremes**

What happens to heading readings in high latitudes? Experienced engineers know that heading accuracy in these extreme latitudes is hard to come by, as the pull of magnetic north will send most mag heading readings haywire.

What is SeaTRAX-85°? SeaTRAX-85° is the first towed array heading sensor engineered to deliver the most accurate heading data in harsh, extreme latitudes. Its highly-sensitive magnetometer readings are refined by

It delivers serial digital outputs of: precise, reliable heading, pitch, roll, magnetic sensor and accelerometer readings.



How good is it? Unlike standard sensors used in many towed arrays, SeaTRAX-85° delivers heading accuracies of 0.25° in the Arctic Circle – previously unheard of in a tiny digital magnetic compass module. Even at 85° latitude, it delivers better than 1.5° heading accuracy. So you get clear survey images even in the Arctic Ocean.

Will it fit? At less than half the size of other heading sensors, SeaTRAX-85° will fit almost everywhere. And because it consumes only one tenth of the power, it's ideal for use in long

missions and in harsh environments.

And, of course, it works beautifully in lower latitudes as well.

SPECS:

Size: 50x10x9.4 mm

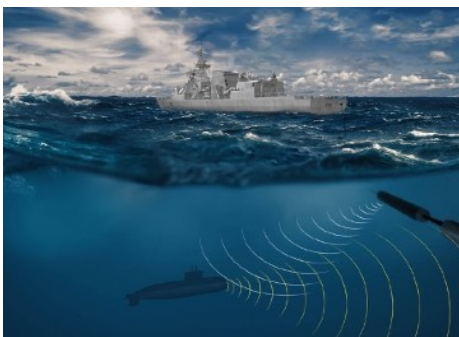
Weight: 2.3 g

Integrated Sensors: 3-axis Magnetometer, 3-axis Accelerometer

Capability:

- High-sensitivity, low-noise PNI Magnetometers enable accuracy in extreme latitudes.
- Built-in hard-iron and soft-iron correction.
- "Strapped-down" magnetic compass which compensates for all tilt angles.
- Low SWaP-C

For more information, please visit www.pnicorp/SeaTRAX-85°



state-of-the-art algorithms that calibrate for magnetic distortion and compensates for all tilt angles.



SeaTRAX-85°



Heading	Accuracy	0.25° rms	65° dip angle
		0.5° rms	75° dip angle
		0.75° rms	80° dip angle
		1.4°rms	85° dip angle
	Repeatability	0.05° rms	
	Resolution	0.01°	
Tilt	Range	±90° of pitch ±180° of roll	
	Accuracy	0.1° rms	
	Repeatability	0.05° rms	
	Resolution	0.01°	
I/O Characteristics	Communication Interface	TTL/CMOS serial UART	
Mechanical Characteristics	Dimensions (l x w x h)	50x10x9.4 mm	
Power Requirements	Supply Voltage (unregulated)	2.9 - 5.5 VDC	
	Typical Current draw	9.5 mA	

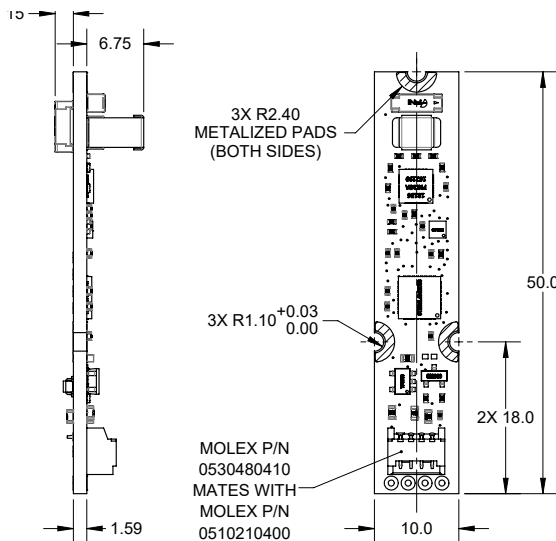
About PNI Sensor

PNI is an American positioning and navigation product and technology company that provides highly accurate, precise position and navigation data to systems, using proprietary sensors, algorithms and Edge AI.

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.

US-based PNI has worked with many notable companies serving the DoD and is experienced in meeting the high standards of the military sector. PNI was selected as the 2023 XTech/Search 7 winner.

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To learn more, please visit www.pnicorp.com/SeaTRAX-85°