



Geo-Pointer

Epoch-by-Epoch® High-Accuracy, Real-Time Heading System

The Geo-Pointer is a high-accuracy, real-time heading system for dynamic platforms based on GPS. The system utilizes the relative positions between two GPS antennas mounted on a platform to compute precise heading and pitch (or roll) information. Applications include heading and pitch (or roll) for manned and unmanned air, sea and ground vehicles, and robotics. The Geo-Pointer is powered by Geodetics' Epoch-by-Epoch® instantaneous differential GPS technology.

Geo-Pointer Features

- + .1 degree accuracy (depends on baseline separation of antennas)*
 - + Small footprint - 33.8 cubic inches
 - + Light weight - 20 oz
 - + 3 RS-232 ports and 1 Ethernet port
 - + On-board data logging of all raw and solution data
 - + Powered by Precise Instantaneous Network (PIN) positioning, based on Geodetics' Epoch-by-Epoch® technology, a new network-based real-time methodology not requiring multi-epoch initialization and re-initialization
 - + Mil-Spec ruggedization
 - + On board end-user application support
 - + Not sensitive to magnetic fields
 - + Can be configured to provide high-accuracy position information as well as heading and pitch (or roll)
- *Accuracy is dependent on GPS satellite system performance, ionospheric conditions, satellite visibility, IMU type, data link and other factors.



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Technical Specifications

Size, Weight and Construction

- + 33.8 cubic inches
- + 20 oz
- + MIL-810E Environmental compliant
- + MIL-461 EMI and RFI compliant

Power

- + 10-30 VDC @ 2 AMPS minimum

Interfaces

- + External power connector
- + 2 TNC GPS antenna connector
- + SMA RF connector for optional internal data link
- + 1 Ethernet data port
- + 3 RS-232 serial ports
- + 1PPS output
- + 4 status LEDs

Real-Time Data Output

- + Precise heading
- + Precise pitch (or roll)
- + Solutions up to 20 Hz. available via Ethernet, RS232 or optional wireless data link

Data Recording/Logging

- + Heading and pitch (or roll) solutions
- + Raw GPS data (for post processing),
- + Full diagnostics

Wireless Communications Options

- + Internal TDMA data-link (various frequencies available)
- + AES encryption and Point-to-Point mode available
- + Support for external datalink via RS-232 or Ethernet

RTK Algorithm

- + Precise Instantaneous Network (PIN) Positioning with Geodetics' Epoch-by- Epoch® technology

Safety and Diagnostics

- + Internal safety and monitoring systems
- + Internal BIT with operator notification

Temperature

- + Operating: -40°F to +185°F (-40°C to +85°C)
- + Storage: -67°F to +185°F (-55°C to +85°C)

