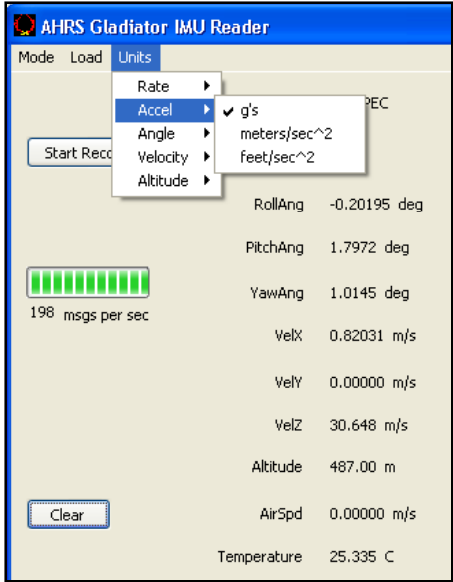


# LANDMARK20 AHRS DEMO KIT



# DEMO KIT

- Turn-Key Solution for LandMark20 AHRS on User's PC
- All Software, Cabling, Interface Connectors Included and Ready for Use
- Easy Integration of Direct AHRS RS485 to PC's RS232 or USB Interface
- Extensive PC Display Software
- Data Record Capability
- User Selectable Bandwidth Settings and Data Output Rate
- User Selectable Units of Measure
- User Loading of Coefficients for System Optimization
- Self-Contained Power Supply with either Battery or User Supplied Power
- Battery Supply Has 24 Hours of Operating Life *Typical*
- Self-Test Capability



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# LandMark20 AHRS DEMO KIT

LandMark20 AHRS DEMO Kit

LMRK20AHRS-DEMO-110

The LandMark20 Demonstration Kit is an optional product to assist first time users of the LandMark20 in order to facilitate a rapid setup, test and use of the unit (P/N: LMRK20AHRS-DEMO-110). Please contact the factory or your local Gladiator Representative for in-country service and support at [www.GladiatorTechnologies.com](http://www.GladiatorTechnologies.com).

The LandMark20 Demonstration Kit includes all cabling required to interface directly from the AHRS's RS485 interface to a PC's RS232 or USB interface. Also included is a RS485 to RS232 converter, cabling and mating connectors. The converter cable includes battery powered power supply (there is also wiring on the cable to enable the user to supply their own + 3.3V (+ 1.3V, -0.3V) power and a self-test switch. The battery power supply uses three 9 Volt AA batteries (included with shipment) and supplies user battery power on the AHRS for about 24 hours typical. In addition, PC display software is included which enables the user to display each channel of rate and acceleration, each axis' angle output, altitude, temperature as well as to monitor Self Test Pass parameters and magnetic calibration capability. The software also enables the user to record data sets of their choosing in .CSV format for export in Excel or other user database. Many other features allow user selectable setting of the bandwidth filter, output data rate and units of measure.

**Self Test is Active**

**User Defined Units of Measure**

**Data Record Capability and Select Data Rate**

**Load Coefficients Capability to Optimize System Performance**

**User Selectable :**

- Bandwidth Filter
- Load Coefficients
- Zero Out Airspeed

The screenshots show the 'AHRS Gladiator IMU Reader' software interface. The main window displays 'AHRS mode: FULL' and a table of sensor data including RollAng, PitchAng, YawAng, VelX, VelY, VelZ, Altitude, AirSpd, Temperature, Pressure, AccelX, AccelY, AccelZ, GyroX, GyroY, GyroZ, and MagX. A 'Start Record' button is visible. A callout box points to a 'Self Test' indicator showing a green bar and '199 msgs per sec'. Another callout points to a 'Units' dropdown menu with options for Rate, Accel (g's, meters/sec^2, feet/sec^2), Angle, Velocity, and Altitude. A third callout points to a 'Data Record' section showing a green bar and '198 msgs per sec'. A fourth callout points to an 'Upload AHRS Coefs' dialog box with fields for Coef Revision, Filter K, Wheel Diameter, Airspeed Offset, Mag Deviation, Initial Altitude, and various scaling factors. A fifth callout points to a 'Set Filter' dropdown menu with options from 75Hz to 1Hz. A 'Clear' button is also visible in the main window.

Specification subject to change without notice.



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