LT-500 AHRS

Attitude Heading Reference System

What does it do?

The LT-500 Attitude Heading Reference System (AHRS) is a combined heading sensor and an electronic compass. The LT-500 AHRS is providing navigational data on both NMEA 0183 and NMEA 2000. It gives you:

Magnetic heading, deviation, roll, pitch, rate of turn, temperature and air pressure.

If a GPS is connected, you also get true heading and variation.

What does it replace?

LT-500 AHRS replaces or works as backup for a gyrocompass, satellite compass, magnetic/electrical compass, fluxgate compass, barometer, thermometer and pitch & roll sensors.

What equipment is used together with LT-500 AHRS?

The LT-500 AHRS provides heading to chart-plotters, autopilots, radars and displays. Either as the primary input sensor or as the secondary (back-up) sensor. It can be installed below deck in any orientation.

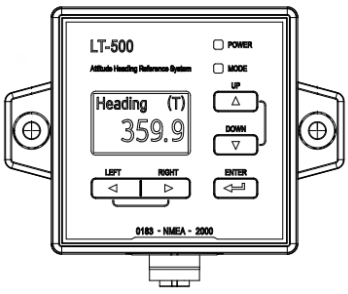
Why use LT-500 AHRS?

LT-500 AHRS offers high performance and functionality matching much more expensive solutions. Performance data is available on page 2. A PC application, LT-Service Tool, is available for optional configuration and installation of the LT-500 AHRS.

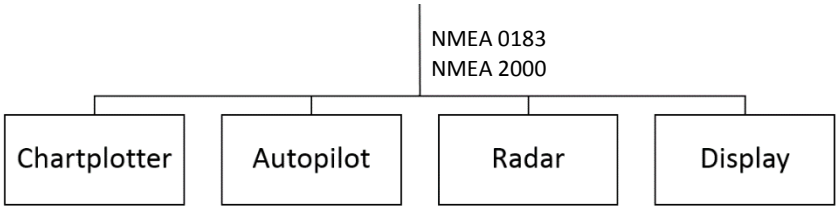
What's In-the-box:

LT-500 AHRS, pole & roof mount, 10 m. cable, NMEA 2000 screw-in connector, screws, quick installation guide, safety instruction sheet, and unit test sheet

LT-500 AHRS



Output:
Magnetic Heading
Deviation
Variation (if GPS is connected)
Rate of Turn (ROT)
Roll/Pitch
Temperature
Air Pressure



Performance:

Data	Accuracy	Resolution	Range/Comments
Heading	Heading1 Static: < 0.5˚ (rms) Dynamic: < 1.5˚ (rms)	0.1°	Heading is calculated with input from Sensor-fusion technology and Kalman filtering
Roll/Pitch	Static: < 0.5° (rms)	0.1˚	±90°
Rate of Turn	< 1°/s	0.1˚/s	0 to 45°/s
Air Pressure	1 hPa	0.1 hPa	800 to 1100 hPa
Air Temperature	1˚C (1.8˚F) 2˚C (3.6˚F)	0.1˚C (0.1˚F)	0°C to +55°C (+32°F to +131°F) -25°C to 0°C (-13°F to +32°F)

Specifications:

- Dimensions: 91.6 x 75.3 x 32.7 mm (3.61 x 2.96 x 1.29 in)
- Weight: 104 g (0.23 lbs)
- Temperature (ambient), operational: -25°C to +55°C (-13°F to +131°F)
- Waterproof: IP42 / Humidity: 95% non-condensing @ 40°C
- Communication Interface: 8-pin female connector for NMEA 0183, NMEA 2000 and power
- Input power: 9-40 VDC
- Power consumption: < 1W
- Compass safe distance: 0.3 m (1 feet)

Examples of installations:

ABOUT LARS THRANE A/S

Lars Thrane A/S specializes in design and manufacturing high-performance navigation sensors using the latest sensor technology. The aim of the company is to provide customers worldwide access to high quality, fully calibrated navigational sensors with state-of-the-art digital filtering technology. With a strong background in engineering and experience in the development and testing of maritime communications and navigation equipment, Lars Thrane A/S brings high performance filtering and calibration techniques into the marine world. Lars Thrane A/S is a privately owned company headquartered in Copenhagen, Denmark.