



ATTITUDE AND MAGNETIC HEADING REFERENCE AND NAVIGATION SYSTEM

Main Features

- Real-time reliable data in marine dynamic environments
- Drift free attitude data
- Proprietary Kalman filter algorithm based on cutting-edge data fusion
- Compact / lightweight
- Engine magnetic field compensation

Ideal for:

Marine stabilization systems

Unmanned surface platforms

Compact underwater ROV



MRS-011 is an attitude measurement system based on high quality MEMS sensors, integrating GEM proprietary algorithms based on Kalman Filters for platform attitude over time, the calculation of heading and the routing of navigation data coming from the GPS/DVL/USBL.



MRS-011

Standalone attitude measurement system based on high-quality MEMS sensors

Attitude	
Roll and Pitch Accuracy [RMS]	< 0.25 °
Magnetic heading Accuracy [RMS]	< 1 ° after calibration
Roll Range	± 180 °
Pitch Range	± 90 °
Resolution	0.01 °
Linear Acceleration	
Range X/Y/Z	± 10 m/ sec ²
Resolution	0.00036 m/ sec ²
Bandwidth	40 Hz
Angular Rate	
Range Roll/Pitch/Yaw	± 300 °/sec
Resolution	0.008 °/sec
Bandwidth	40 Hz

Start-up Time	
Start-up Time Valid data	5 sec
Fully stabilized data	30 sec
Other	
Update Rate	100 Hz
Operating Temperatures	-0/+50 ° C
Storing Temperatures	-40/+70 ° C
Input Power Supply	12 to 32 VDC

