



ATTITUDE REFERENCE SYSTEM - ROLL & PITCH STABILIZATION

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
- No calibration /configuration required

Ideal for:

Marine stabilization systems

Unmanned surface platforms

Yachts and leisure boats



High stability sensors provide responsive and reliable rotation rate and acceleration information. RRS-011 merges accurate data measured by its solid state IMU (Inertial Measurement Unit) with GEM elettronica extended and proprietary sensor fusion algorithm.



Standalone attitude measurement system based on high-quality MEMS sensors

Attitude

Static Accuracy [RMS]	0.4 °
Dynamic Accuracy [RMS]	1 °
Roll Range	± 180°
Pitch Range	± 90°
Resolution	0.001°

Yaw

Range	± 180°
Drift max	0.05°/sec 1σ
Resolution	0.001°

Angular Rate

Range Roll/Pitch/Yaw	± 300°/sec
Resolution	0.008 °/sec
Bandwidth	40 Hz

Linear Acceleration

Range X/Y/Z	± 10 m/ sec ²
Resolution	0.00036 m/ sec ²
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

