

# RRS-011

## 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.

# RRS-011

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°

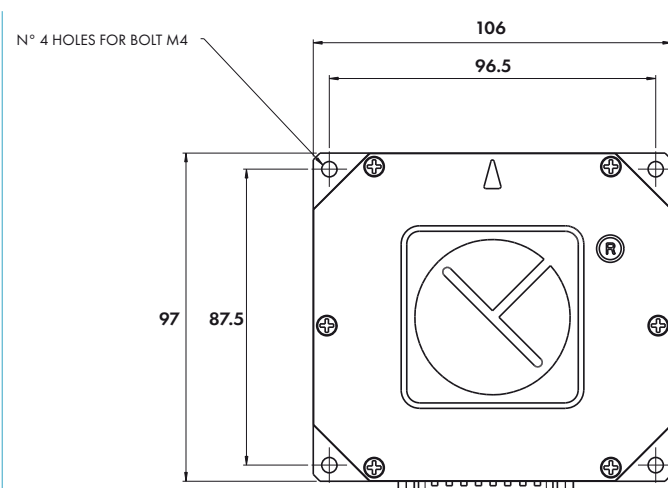
Yaw	
Range	± 180°
Drift max	0.05°/sec 1σ
Resolution	0.001°

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

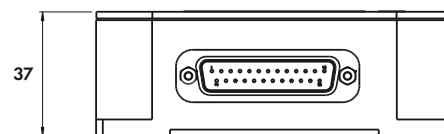
Linear Acceleration	
Range X/Y/Z	± 10 m/ sec <sup>2</sup>
Resolution	0.00036 m/ sec <sup>2</sup>
Bandwidth	40 Hz

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



Dimensions in mm



Weight: 0,4 Kg

Surveillance & Security

Guidance, Navigation & Positioning

Military & Defence

Marine Electronics

This brochure should not be considered a contractual offer. The specifications given herein may be changed by the manufacturer, GEM elettronica S.r.l., without notice.



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