



RSM 50

The RSM 50 is the smallest and most cost-effective of SOMAG's marine gyro stabilizers and targets the acquisition of perfectly stabilized offshore data. The Mount features a compact and light-weight design and suitable for deployment on USVs and small buoys for sensor stabilization up to $\pm 20.0^\circ$ in the roll and pitch axis.

TECHNICAL SPECIFICATIONS

Angular Stabilization Ranges	Pitch at 0° Roll: $\leq \pm 20.0^\circ$ Roll at 0° Pitch: $\leq \pm 20.0^\circ$ Yaw (Drift): no drift correction
Residual Deviation¹	$\leq 0.3^\circ$ rms
Payload²	40 kg 25 kg 12.5 kg 88.2 lbs 55.1 lbs 27.6 lbs
Continuous Torque	25 Nm
Dynamic Peak Torque³	50 Nm
Mass	11.5 kg 24.3 lbs
Dimensions	197.5 mm 7.8 in $\varnothing 306$ mm $\varnothing 12$ in
IP Class	IP 67
Operating Temperature	-32 °C ... +55 °C -22 °F ... +131 °F
Storage Temperature	-55 °C ... +85 °C -67 °F ... +185 °F
Communication Interfaces	Ethernet RS422 RS232 (optional)
Operational Voltage	24 VDC (24...30 VDC)
Average Power Consumption⁴ at Operational Voltage	50 W
Peak Power Consumption⁴ at Operational Voltage	250 W
	IACS E10, DNV GL, 2006/42/EC Machinery

Preliminary data, subject to change

¹ Vehicle motion $\leq \pm 18^\circ / 25^\circ/s / 40^\circ/s^2$ – small periodical lateral accelerations (≤ 0.5 g) acceptable; constant lateral accelerations for more than 1 minute resulting from vehicle's turning maneuvers are compensated by internal or external GPS input. No GPS input could reduce the performance of the Mount during turning maneuvers.

² Possible payload weight depends on lateral acceleration and CoG of payload / shown data is based on 0.9 g lateral acceleration and a CoG payload offset to the Mount surface of: 250 mm (9.8 in) | 400 mm (15.7 in) | 500 mm (19.7 in)

³ Maximum duration 90 s at 55 °C surrounding temperature | longer if temperature inside the unit is $< 55^\circ\text{C}$

⁴ Horizontal payload CoG offsets are not considered; without wind force and other possible external forces

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RUGGEDIZED STABILIZATION MOUNT



COMPACT AND LIGHTWEIGHT DESIGN

suitable for deployment on USVs and small buoys



IP 67

for high performance stabilization in rough maritime environments



INSTALLATION FLEXIBILITY

upside-down hanging application possibility



ETHERNET INTERFACE

for integration in ship's infrastructure

Field of Application



MARINE

Application Examples



Antenna System



LiDAR System



SCAN ME.

Scan this QR-Code with your phone to get further information about the RSM 50 - Marine.

SOMAG AG Jena

Am Zementwerk 8 | 07745 Jena | Germany
+49 3641 633 68 0 | www.somag-ag.de | info@somag-ag.de