RSM 50

The Ruggedized Stabilization Platform 50 is designed to provide the highest possible level of stabilization for mobile mapping, scanning, imaging and video capturing with ground vehicles. The RSM 50 is the smallest and most cost-effective of SOMAG's land gyro stabilizers and suitable for deployment on UGVs for sensor stabilization up to ≤± 20.0° in the roll and pitch axis.

TECHNICAL SPECIFICATIONS

Angular Stabilization Ranges	Pitch at 0° Roll:	≤± 20.0°
	Roll at 0° Pitch:	≤± 20.0°
	Yaw (Drift):	no drift correction
Residual Deviation[1]		≤0.3° rms
Payload[2]		40 kg | 25 kg | 12.5 kg 88 lbs | 55 lbs | 28 lbs
Continuous Torque		25 Nm
Dynamic Peak Torque[3]		50 Nm
Mass		11.5 kg | 24.3 lbs
Dimensions		197.5 mm | 7.8 in Ø306 mm | Ø12 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 Consumption[4] **at Operational Voltage**		50 W
Peak Power Consumption[4] **at Operational Voltage**		250 W
Applied Standards		IACS E10, DNV GL, 2006/42/EC Machinery

Preliminary data, subject to change.
The technical specifications in the metric system represent the binding reference values. The imperial units are rounded approximations and are provided for reference only.

1 Vehicle motion ≤± 18° / 25°/s / 40°/s² – 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 °C

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

www.somag-ag.de

RSM 50
RUGGEDIZED STABILIZATION MOUNT

COMPACT AND LIGHTWEIGHT DESIGN
suitable for deployment on UGVs, cars and other land vehicles

IP 67
for high performance stabilization in rough maritime environments

INSTALLATION FLEXIBILITY
upside-down hanging application possibility

ETHERNET INTERFACE
for integration in existing networks

Field of Application

LAND

Application Examples

Antenna System

LiDAR System

SCAN ME.

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

SOMAG AG Jena
Am Zementwerk 2 | 07745 Jena | Germany
+49 3641 633 68 0 | www.somag-ag.de | info@somag-ag.de