



NSM 500

The NSM 500 provides effective gyro stabilization for electro-optical reconnaissance and surveillance sensor systems to improve situational awareness in rough sea conditions. The two-axis gimbal ensures a stabilized field of view and high-resolution images by compensating the roll and pitch movements of the vessel.

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	100 kg 70 kg 55 kg 220 lbs 154 lbs 121 lbs
Continuous Torque	125 Nm
Dynamic Peak Torque³	250 Nm
Mass	33 kg 72.8 lbs
Dimensions	290 mm 11.42 in Ø486 mm Ø19.13 in
IP Class	IP 67
Operating Temperature	-32 °C ... +55 °C -26 °F ... +131 °F
Storage Temperature	-55 °C ... +85 °C -67 °F ... +185 °F
Communication Interfaces	Ethernet RS422 RS232
Operational Voltage	24 VDC (24...30 VDC)
Average Power Consumption⁴ at Operational Voltage	70 W
Peak Power Consumption⁴ at Operational Voltage	450 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 $\leq \pm 18^\circ / 15^\circ/\text{s} / 40^\circ/\text{s}^2$ – small periodical lateral accelerations (≤ 0.5 g) acceptable, constant lateral accelerations for more than 1 minute reduce the performance of the Mount (can be compensated by external GPS input)

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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NAUTICAL STABILIZATION MOUNT



PRECISE SENSOR STABILIZATION

on medium to large maritime vessels



IP 67

for high performance stabilization
in rough maritime environments



MEDIUM-SIZED GIMBAL

of SOMAG Marine
Gyro Stabilization Mounts



ETHERNET INTERFACE

for integration in ship's
infrastructure

Field of Application



MARINE

Application Examples



Antenna System



Pan/Tilt Camera



SCAN ME.

Scan this QR-Code with
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information about the
NSM 500 - Marine.

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