



# 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

<b>Angular Stabilization Ranges</b>	Pitch at 0° Roll: $\leq \pm 20.0^\circ$ Roll at 0° Pitch: $\leq \pm 20.0^\circ$ Yaw (Drift): no drift correction
<b>Residual Deviation<sup>1</sup></b>	$\leq 0.3^\circ$ rms
<b>Payload<sup>2</sup></b>	100 kg   70 kg   55 kg 220.5 lbs   154.3 lbs   121.3 lbs
<b>Continuous Torque</b>	125 Nm
<b>Dynamic Peak Torque<sup>3</sup></b>	250 Nm
<b>Mass</b>	33 kg   72.5 lbs
<b>Dimensions</b>	290 mm   11.4 in $\varnothing 486$ mm   $\varnothing 19.1$ in
<b>IP Class</b>	IP 67
<b>Operating Temperature</b>	-32 °C ... +55 °C   -25.6 °F ... +131 °F
<b>Storage Temperature</b>	-55 °C ... +85 °C   -67 °F ... +185 °F
<b>Communication Interfaces</b>	Ethernet   RS422   RS232
<b>Operational Voltage</b>	24 VDC (24...30 VDC)
<b>Average Power Consumption<sup>4</sup> at Operational Voltage</b>	70 W
<b>Peak Power Consumption<sup>4</sup> at Operational Voltage</b>	450 W
	IACS E10, DNV GL, 2006/42/EC Machinery

Preliminary data, subject to change

<sup>1</sup> Vehicle motion  $\leq \pm 18^\circ / 15^\circ/s / 40^\circ/s^2$  – small periodical lateral accelerations ( $\leq 0.5$  g) acceptable, constant lateral accelerations for more than 1 minute reduce the performance of the Mount (can be compensated by external GPS input)

<sup>2</sup> 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)

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

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

# NSM 500 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



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information about the  
NSM 500 - Marine.

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