

# NSM 500

The NSM 500 is designed to provide the best possible data acquisition and transmission in mobile land applications. The two-axis gimbal ensures a stabilized field of view and high-resolution images by compensating the roll and pitch of vehicles up to  $\leq \pm 20.0^{\circ}$  in the roll and pitch axis. The gimbal is suitable for both commercial applications and demanding military missions.

# **TECHNICAL SPECIFICATIONS**

Angular Stabilization Ranges	Pitch at 0° Roll:	≤± 20.0°
	Roll at 0° Pitch:	≤± 20.0°
	Yaw (Drift):	no drift correction
Residual Deviation <sup>1</sup>		≤0.3° rms
Payload <sup>2</sup>		100 kg   70 kg   55 kg
		220.5 lbs   154.3 lbs   121.3 lbs
Continuous Torque		125 Nm
Dynamic Peak Torque <sup>3</sup>		250 Nm
Mass		33 kg   72.5 lbs
Dimensions		290 mm   11.4 in
		Ø486 mm   Ø19.1 in
IP Class		IP 67
Operating Temperature		-32 °C +55 °C   -25.6 °F +131 °F
Storage Temperature		-55 °C +85 °C   -67 °F +185 °F
Communication Interfaces		Ethernet   RS422   RS232
Operational Voltage		24 VDC (2430 VDC)
Average Power Consumption <sup>4</sup> at Operational Voltage	9	70 W
Peak Power Consumption <sup>4</sup> at Operational Voltage		450 W
		IACS E10, DNV GL, 2006/42/EC Machinery

Preliminary data, subject to change

- ¹ Vehicle motion ≤± 18° / 15°/s / 40°/s2 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)
- <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)
- $^3$  Maximum duration 90 s at 55  $^{\circ}$ C surrounding temperature | longer if temperature inside the unit is < 55  $^{\circ}$ C
- <sup>4</sup> Horizontal payload CoG offsets are not considered; without wind force and other possible external forces





#### **MEDIUM-SIZED GIMBAL**

for precie sensor stabilization on ground vehicles



#### IP class 67

for high performance stabilization in rough maritime environments



#### **COMPACT HYDRAULIC SYSTEM**

for sensor stabilization up to 100 kg (220.5 lbs) at only 33 kg self-weight



#### **ETHERNET INTERFACE**

for integration in ship's infrastructure

### **Field of Application**



LAND

## **Application Examples**



Antenna System



Pan/Tilt Camera



## SCAN ME.

Scan this QR-Code with your phone to get further information about the NSM 500 - Land.

#### SOMAG AG Jena