



# OSM 5000

The OSM 5000 is SOMAG's most powerful gimbal system for precise sensor stabilization in on-the-move environments. The gimbal is designed to ensure the best possible mobile data capturing whether on the road or off-road with heavy single- or multisensor payloads of up to 300 kg (660 lbs). IP class 67 protects the offroad gimbal from environmental influences such as dust, salt- and splash water.

## TECHNICAL SPECIFICATIONS

<b>Angular Stabilization Ranges</b>	Pitch at 0° Roll: $\leq \pm 12.2^\circ$   $14.1^\circ$ (optional) Roll at 0° Pitch: $\leq \pm 17.4^\circ$   $14.1^\circ$ (optional) Yaw (Drift): no drift correction
<b>Residual Deviation<sup>1</sup></b>	$\leq 0.3^\circ$ rms
<b>Payload<sup>2</sup></b>	300 kg   250 kg   200 kg 660 lbs   550 lbs   440 lbs
<b>Continuous Torque</b>	275 Nm
<b>Dynamic Peak Torque<sup>3</sup></b>	550 Nm
<b>Mass</b>	55 kg   120 lbs
<b>Dimensions</b>	290 mm   11.4 in $\varnothing 665$ mm   $\varnothing 26.1$ in
<b>IP Class</b>	IP 67
<b>Operating Temperature</b>	-32 °C ... +55 °C   -22 °F ... +131 °F
<b>Storage Temperature</b>	-55 °C ... +85 °C   -67 °F ... +185 °F
<b>Communication Interfaces</b>	Ethernet   RS422   RS232 (optional)
<b>Operational Voltage</b>	48 VDC (44...52 VDC)
<b>Average Power Consumption<sup>4</sup> at Operational Voltage</b>	100 W
<b>Peak Power Consumption<sup>4</sup> at Operational Voltage</b>	950 W
	IACS E10, DNV GL, 2006/42/EC Machinery

Preliminary data, subject to change

<sup>1</sup> Vehicle motion  $\leq \pm 12^\circ$  /  $12^\circ/s$  /  $10^\circ/s^2$  - small periodical lateral accelerations ( $\leq 0.5$  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.

<sup>2</sup> Possible payload weight depends on lateral acceleration and CoG of payload / shown data is based on 0.5 g lateral acceleration and a CoG payload offset to the Mount surface of: 370 mm (14.6 in) | 450 mm (17.7 in) | 550 mm (21.7 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

# OSM 5000 OFFROAD STABILIZATION MOUNT



## HIGHEST PAYLOAD STABILIZATION

of SOMAG Land  
Gyro Stabilization Mounts



## IP class 67

for high performance stabilization  
in rough maritime environments



## TWO STABILIZATION RANGES AVAILABLE

for best stabilization results tailored to  
individual application



## ETHERNET INTERFACE

for network integration

## Field of Application



LAND

## Application Examples



Pan/Tilt Surveillance  
System



Radar System



## SCAN ME.

Scan this QR-Code with  
your phone to get further  
information about the  
OSM 5000 - Land.

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