SOMAG

GSM 4000

The GSM 4000 Gyro Stabilization Mount is the successor to the world-renowned GSM 3000 and the flagship of SOMAG's airborne Gyro Mount line. The 3-axis gimbal is designed to automatically stabilize large format aerial cameras, scanners, LiDARs and other imaging sensors and compensate for drift, roll and pitch in real time for the best possible data capture quality.

TECHNICAL SPECIFICATIONS

Angular Stabilization Ranges	Pitch at 0° Roll: Roll at 0° Pitch: Yaw (Drift):	≤± 8.8° ≤± 7.0° ≤± 25.0°
Residual Angular Rate[1]		≤± 0.2°/s rms
Residual Deviation	without IMU support[1]: with IMU support[1,2]:	≤0.3° rms ≤0.02° rms
Payload[3]		10...120 kg | 22...264.55 lbs
Mass		29 kg | 63.9 lbs
Dimensions (Regular Leveling Positions)	Length: Width: Height[4]:	615 mm | 24.2 in 530 mm | 20.9 in 175 mm | 6.9 in
Usable Diameter		Ø410 mm | Ø16.1 in
Operating Temperature		-15 °C ... +55 °C | -5 °F ... +131 °F
Storage Temperature		-55 °C ... +85 °C | -40 °F ... +185 °F
Communication Interfaces		RS 232 | USB
Operational Voltage		28 VDC (24...30 VDC)
Average Power Consumption[5] **at Operational Voltage**		50 W
Peak Power Consumption[5] **at Operational Voltage**		180 W
Applied Standards		RTCA DO-160-G, EUROCAE-14G, ISO 7137, 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 angular motion <10°/s and with typical data acquisition profile frequency spectrum
2 Deviation from perpendicular depends on accuracy of used IMU
3 Minimum payload is based on usage of Passive Vibration Isolation Ring
4 Minimum 149.5 mm (5.8 in) | Maximum 200.5 mm (7.9 in)
5 Horizontal payload CoG offsets are not considered; without wind force and other possible external forces

www.somag-ag.de

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GSM 4000
GYRO STABILIZATION MOUNT

INDUSTRY STANDARD
for large format cameras
and scanners

HIGHEST PAYLOAD STABILIZATION
of SOMAG Airborne
Gyro Stabilization Mounts

BEST STABILIZATION ACCURACY
for large format cameras
and scanners

LIFT-UP FUNCTION
for easy access to the camera
lens or bottom of the sensor

Field of Application

AIRBORNE

Application Examples

Vexcel UltraCams

Riegl LiDARs

Teledyne Optech LiDARs

IGI Mapping Systems

SCAN ME.

Scan this QR-Code with your phone to get further information about the GSM 4000.

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