

ELECTRONICS & DEFENSE



SIGMA 20M

GYROCOMPASS & AHRS

- Full MIL-Spec qualified
- Maintenance free
- Fast settling time
- No need for GPS aiding

SIGMA 20M

Gyrocompass & AHRS

Capitalizing on Safran Electronics & Defense's 70-year experience in inertial technologies, Sigma 20M is a compact strap down and cost-effective full MIL-Spec gyro compass & AHRS. Based on advanced Hemispherical Resonator Gyros (HRG), Sigma 20M expands the well-known Sigma 40 Ring Laser Gyro INS family, the world's high performance best-selling naval INS.

Thanks to its solid state technology, Sigma 20M is maintenance free and provides unrivalled reliability and operational availability. Sigma 20M does not require GPS aiding to deliver full accuracy. It makes it the perfect solution in GPS denied situations.

Easily integrated in any military or paramilitary ship as primary AHRS system or safety gyrocompass, Sigma 20M is specially designed to withstand stringent environmental conditions such as shocks, vibrations, and magnetic environment.

This is therefore the ideal solution for Minehunters & Offshore Patrol Vessels, or back-up gyrocompass aboard major combatants and submarines.

HRG technology

Being produced for 15 years, HRGs are widely recognized for their outstanding performance, integrity and unrivaled reliability (MTBF > 1,000,000 hours), making them an indispensable sensor for all value-added operational missions, starting with satellites, space launchers, surface vessels and now submarines.



- Accurate Heading, Roll & Pitch
- Unrivalled reliability
- 100% in-house technology
- Solid state technology
- Cost-effective maintenance free solution



Performances

	SIGMA 20M
POSITION (TDRMS)	1Nm/1h
HEADING (seclat RMS)	0.05 deg
ROLL & PITCH (RMS)	0.01 deg

Technical specifications

MTBF

- >100,000 hours

SWaP

- Size: 208 x 136 x 292mm
- Weight: 4.5kg
- Power: 28W

Power supply

- 24 VDC

Environments

- Operating temperature: -20°C to +60°C
- Humidity: 95% relative
- Shock: MIL-STD-810F 50g ½ sine wave 11ms
- Sinusoidal vibration: MIL-STD-167-1 for type 1 equipment
- Random vibration: MIL-STD-810F
- EMI/RFI: MIL-STD-461E
- Waterproofness: IP67

European in-house technology

Safran Electronics & Defense
 Arcs de Seine - 18/20 quai du Point du Jour - 92659 Boulogne-Billancourt Cedex - France
 Tel.: +33 1 55 60 39 96 - Fax: +33 1 55 60 38 95
safran-electronics-defense.com

