

NEDAERO FIBER OPTIC RATE SENSORS

NEDAERO FIBER OPTIC PROGRAM

Early 2018 NEDAERO has validated its Fiber Optic Gyro sensor for the aerospace industry. The FOG60 model has been successfully certified for a commercial airline program, and is now in series production. It's a 100% European product whereby all materials are purchased from European suppliers.

The sensor is suitable for flight stabilization and attitude control of aircraft, helicopters, drones and missiles. Further application comprises Inertial Measurement Units and Navigation Systems. Other application examples comprise azimuth measurement of land vehicles, optics or antenna stabilization as well as high dynamical sensor platforms or other industrial purposes.

The FOG's produced by NEDAERO are ITAR-free.

KEY FEATURES AND BENEFITS

- ⊕ Fiber optic technology without moving parts
- ⊕ High reliability
- ⊕ Forceful design
- ⊕ Analogue voltage output and Build-In-Test functionality
- ⊕ Robust metal housing
- ⊕ Temperature output for compensation

FIBER OPTIC RATE SENSOR FOG

The NEDAERO Fiber Optic Rate Sensor FOG is a small palm of the hand-sized rate sensor. It provides turn rate for one rotational axis. The modular design allows a cost-effective realization of single or multiple sensing axis units.

TECHNICAL DATA AND SPECIFICATIONS NEDAERO RATE SENSOR

	FOG60	FOG80
Measuring range	± 300 °/sec	± 300 °/sec
Bias stability	≤ 1 °/hr	≤ 0.2 °/hr
Dimensions	60 x 60 x 19.5 mm	80 x 80 x 20 mm
Weight	85 g	150 g
Operating temperature range	-40 °C to +70 °C	-40 °C to +70 °C

INERTIAL MEASUREMENT UNIT (future development)

The IMU 360 is a three-axis unit which supplies angular rate and acceleration information. The unit can be used for attitude control and navigation of missiles, drones etc.

TECHNICAL DATA AND SPECIFICATIONS NEDAERO IMU 360

Measuring range	± 800 °/sec
Bias stability (typical)	≤ 0.1 °/hr
Acceleration	± 10 g
Operating temperature range	-40 °C to +70 °C

