



RAFAEL's gyro consists of a spinning wheel hinged on a bending spring. The two angular rates are determined via the bending angle of the wheel. The angle is measured using a non contact electro-optic pick-off (no slip rings). The device is available in two models:

- Two-axis rate gyro complete with signal processing unit
 - AC input/DC output.
- Two-axis rate gyro complete with signal processing and motor excitation circuit
 - DC input/DC output.

TECHNICAL SPECIFICATIONS

- Full Scale:** 50 -1000 deg/sec
- High Dynamic Range:** Threshold & resolution less than 0.01% of full scale
- Hysteresis:** Less than 0.02% of full scale
- Drifts:** Less than 0.05% of full scale
- Temp. Sensitivity:** Zero offset change less than 0.2% of full scale
Scale factor change less than 2.5%
- Operational Temp. :** -45°C to 95°C
- Linear Accel. Sensitivity:** Less than 0.03 deg/sec/g
- Dimensions:** Gyro ϕ 21x50 mm
Electronics 30x50x5 mm
Complete (DC/DC) Package 60x60x25mm
- Weight:** Gyro 90 gr
Electronics 25 gr

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CUSTOMIZED TO MEET CUSTOMER REQUIREMENTS

Versatility is achieved by minor gyro design changes, enabling customization to meet special user requirements. Sensor can be supplied as a single device, or as a complete assembly, including electronics, for three axes.

The two-axis angular-rate gyro is a product of RAFAEL, a world leader in the development and production of advanced interdisciplinary weapon systems.

RAFAEL's full range of facilities and services includes the most advanced clean-room assembly lines, quality assurance programs, and a complete environmental-conditions testing laboratory. These enable flexible response to any customer need.

APPLICATIONS

- Seeker stabilization
- Fire-control system stabilization
- Observation systems
- Shipboard antenna stabilization
- Missiles
- Aircraft
- Tanks
- Helicopters

UNIQUE CAPABILITIES

- Low drifts
- Low hysteresis
- High zero stability in presence of linear accelerations
- Constant damping ratio in presence of temperature changes



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