FOG3X112M Low precious 3 axes Closed-loop FOG



FOG3X112M is an outstanding performance 3axes closed loop fiber optic gyroscope series developed by FOGPhotonics, inc. We use 3 pieces F600M fiber optic gyro integrated in one unit. We make full use of our developed technology of Our ASE light source. 3 Fiber optic gyros share one high powe ASE light source. Which also has the best wavelength stability. The FOG3X112M series delivers superior precision and reliable performance at affordable cost and smaller size than other comparable gyros in general, and FOG in particular. The performance of gyros and systems can be optimized for specific requirements and applications on an individual basis. FOGs can be supplied as a stand alone single axis, or as a dual/ triad with common electronics. All FOGs are available with a flexible interface configuration.

Product feathures

Closed loop fiber optic gyroscope High accuracy, low noise sensor All "Solid State" containing no moving parts Digital and/or Analog output Available as 1 -2-3-4 axes configuration High resolution Low latency Lightweight package Temperature modeled Reduced magnetic sensitivity Provisions for extra processing capabilities Ruggedized packaging Great performance with harsh dynamic conditions **Applications**

The FOG solutions are versatile and suitable for a wide variety of demanding applications such as:

- Navigation
- Missile and Torpedoe guidance
- Flight controls
- UUV/UAV/ Target Drones guidance and control
- Gyro compassing / target acquisition systems

FOG Photonics,inc

One Idealphotonics Technology Company

Parameter	Units	FOG3X112M
Angular Random Walk (noise)*	°∕√hr	0.001
Bias stability	°/hr	≤0.5(10s,1σ)
Bias Repeatability (day to day)	°/hr(1ơ)	0.5
Scale factor repeatability	ppm(1ơ)	≤50
Scale Factor Non-Linearity (ma rate, 25°C)	ax ppm,(1σ)	≤50
Dynamic Range (Angular Rate)	°/sec	±600
Band width	HZ	>200
Dimension (Sensing coil)	mm	112x92x62
Weight	g	<600
Operation temperature	°C	-40-+71
Storage temperature	°C	-55-+85
Shock	g	50 g, 11 msec, sawtooth
Vibrations	g	6.63g(20-2000HZ)
Interface		RS422 Or OEM
Power supply	V	±5V
MTBF	Hours	20000
Baud Rate	Kbps	Typ 460.8kbps (User selectable 9.6 Kbps
Data Rate	Hz	Typ500Hz(User Selectable 1 to 1000 Hz)

Note:

* Random Walk determined by Allan variance method