G-F3G90: TRI-AXIS FIBER OPTIC GYROSCOPE

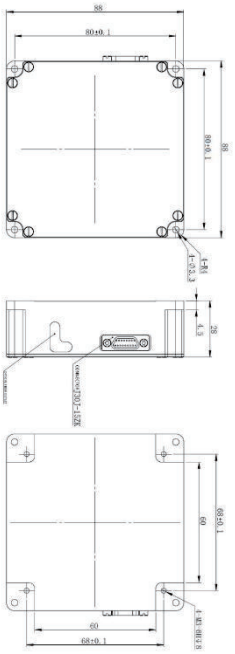
PRODUCT DESCRIPTION

Fiber optic gyroscope, as a new type of all solid state gyroscope, has the advantages of fast start-up, wide measurement range, and high reliability. Among them, the G-F3G90 fiber optic gyroscope inertial unit is designed for the needs of medium and high precision application backgrounds, using three-axis shared technology, with low cost and stable performance; Structurally, it adopts integrated packaging of light path and circuit, with a simple structure and convenient installation. It can be applied to navigation guidance, attitude measurement and control systems of small missiles and guided bombs.

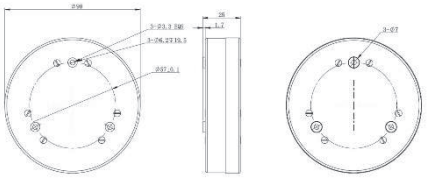
PRODUCT MAIN SPECIFICATION

	U-F3G90-A	U-F3G90-B	U-F3G90-C	Unit
Startup time	5	5	5	*s*
Zero position	≤0.30	≤0.30	≤0.30	*° /hr*
Zero bias stability (Under certain temperature)	≤0.015 (10s) ≤0.008 (100s)	≤0.01 (10s) ≤0.005(100s)	≤0.005 (10s) ≤0.003(100s)	*° /hr*
Zero bias stability (Under changed temperature)	≤0.06	≤0.05	≤0.04	*° /hr (1 ℃/min,100s)*
Zero bias repeatability	≤0.003	≤0.003	≤0.003	*° /hr*
Random walk coefficient	≤0.002	≤0.001	≤0.0005	*° /hr √*
Zero bias magnetic sensitivity	≤0.005			*° /hr/Gs*
The Scale factor of nonlinearity	≤10			*ppm*
The Scale factor of asymmetry	≤10			*ppm*
The Scale factor of repeatability	≤10			
Threshold	≤0.01			*° /hr*
Bandwidth	≥200			*Hz*
Operating temperature	-45 ～ +65			*℃*
Storage temperature	-55 ～ +80			*℃*
Dynamic range	±300			*° /s*
Supply of voltage	±5			*V*
Power consumption (steady state)	≤5.5			*W*
Power consumption (Full temperature steady state)	≤10			*W*
Starting instantaneous current	<2			*A*
Net weight of product	<1300			*g*

PRODUCT DIMENSION



CIRCUIT BOX SIZE: 88*88*28MM



SENSING HEAD SIZE: Φ90MM

PRODUCT APPLICATION

- Crane bin and guide head
- Petroleum geological logging
- Underwater navigation
- North finding instrument
- Navigation GPS
- Marine survey
- Ship navigation attitude measurement
- Angle control of various construction machinery
- Stabilization platform equipment
- Unmanned aerial vehicles (UAV)
- Satellite solar antenna positioning