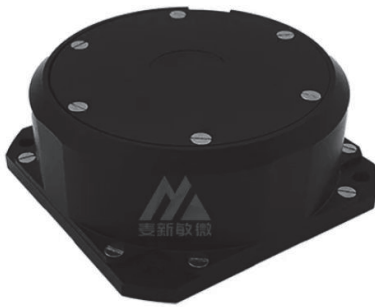


G-F80: MEDIUM AND HIGH PRECISION FIBER OPTIC GYROSCOPE

■ PRODUCT DESCRIPTION

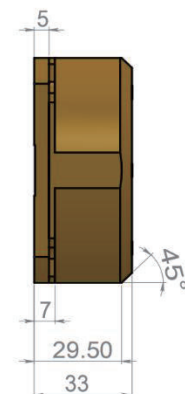
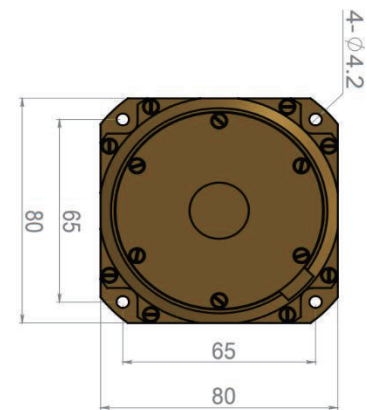


As a new type of all-solid state optical gyroscope, using 1310 scheme, has the advantages of fast start, wide measurement range and high reliability. The G-F80 series of single-axis medium and high-precision fiber optic gyroscopes can be applied to the application requirements of medium-to-high-precision inertial navigation systems such as land positioning and orientation, vehicle-mounted north seekers, airborne heading attitude, and marine gyrocompasses. The specification is only applicable to G-F80 type products, including performance indicators, technical conditions, external dimensions and installation and use. Among them, the technical conditions include the environmental range, electrical performance and physical characteristics of the product.

■ PRODUCT MAIN SPECIFICATION

	G-F80-A	G-F80-B	
Zero bias stability $^{\circ}/hr (1\sigma, 10s)$	≤ 0.02	≤ 0.01	2h continuous testing, 10s smooth results
Zero bias stability $^{\circ}/hr (1\sigma, 100s)$	≤ 0.01	≤ 0.05	2h continuous testing, 100s smooth results
Stabilization times s	< 10	< 10	
Zero bias repeatability $^{\circ}/hr (1\sigma)$	≤ 0.02	≤ 0.01	6 test data calculation results
Full-temperature zero-bias repeatability $^{\circ}/hr$	≤ 0.05	≤ 0.05	
Random walk coefficient $^{\circ}/\sqrt{hr}$	≤ 0.005	≤ 0.005	
The Scale factor of Nonlinearity ppm (1σ)	≤ 10	≤ 10	normal atmospheric temperature
The Scale factor of Repeatability ppm (1σ)	≤ 20	≤ 10	normal atmospheric temperature
Full-temperature scale factor repeatability ppm (1σ)	≤ 150	≤ 100	$-40^{\circ}C \sim +60^{\circ}C$
Dynamic range $^{\circ}/s$	± 500		
Magnetic field sensitivity $^{\circ}/hr/Gs$	≤ 0.02		
Working temperature $^{\circ}C$	$-40 \sim +70$		
Storage temperature $^{\circ}C$	$-50 \sim +70$		
Vibration conditions Hz	4.2g, 20~2000		Sweep frequency vibration has no resonance

■ PRODUCT DIMENSION



SIZE: $\Phi 80 * 29.5MM$

■ PRODUCT APPLICATION

- Fiber optic gyroscope system
- Marine survey
- Stabilization platform equipment
- Petroleum geological logging
- Ship navigation attitude measurement
- Unmanned aerial vehicles (UAV)
- Underwater navigation
- North finding instrument
- Angle control of various construction machinery
- Satellite solar antenna positioning
- Navigation GPS