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F2X64 type Dual-axis low precision Fiber optic gyroscope



Introduction

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. F2X64 model is a two-axis low precision fiber optic gyroscope instrument can be applied to vehicle stabilization platform, guide head, crane bin and other fields.

Application Scope

This manual is only applicable to F2X64 type product, which contains the performance index, 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.

■ Main Parameters

Table 1 Main performance indicators of the product

Zero stability	≤0.5°/hr(1σ,10s)	<u>≤1.0°/hr(1σ,10s)</u>	2h continuous test , 10s smoothing results
Stability time	<10s	<10s	
Zero drift repeatability	≤0.5°/hr(1σ)	≤1.0°/hr(1σ)	Calculated results from 3 tests
Full temp zero drift repeatability	≤0.5°/hr	≤1.0°/hr	
Scale factor non-linearity degree	≤30 ppm(1σ)	≤50 ppm(1σ)	Room temperature
Scale factor repeatability	≤50 ppm(1σ)	≤100 ppm(1σ)	Room temperature
Dynamic range	±400°/s		
Bandwidth	≥100Hz		
Operating temperature	-40°C~+65°C		
Storage temperature	-50°C∼+70°C		
Vibration condition	4.2g,20Hz~2000Hz		

■ External Dimension Drawing

Horizontal dual-axis fiber optic gyroscope instrument form factor: 64mm × 60mm × 42mm, mounting size: four holes 53mm × 57 mm, mounting screws: four M3 screws, the shape and mounting dimensions are shown in Figure 2.



