

## F2X70 type Dual-axis medium precision Fiber optic gyroscope



### Introduction

Fiber Optic Gyroscope, as a new type of full solid gyroscope, has the advantages of starting fast, wide measurement, and high reliability. The F2X70 type is a dual-axis accuracy Fiber Optic Gyroscope instrument can be applied in the field of vehicle stability platforms, guides, and hanging warehouses.

### Application Range

The instructions are only suitable for F2X70 products, including performance indicators, technical conditions, shape size 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	$\leq 0.20^\circ/\text{hr}(1\sigma, 10\text{s})$	2h continuous test , 10s smoothing results
Stability time	<100s	
Zero drift repeatability	$\leq 0.2^\circ/\text{hr}(1\sigma)$	Calculated results from 3 tests
Resolution	$\leq 0.2^\circ/\text{hr}(1\sigma)$	
Random walk coefficient	$\leq 0.02^\circ/\sqrt{\text{hr}}$	
Full tempzero driit repeatability	$\leq 0.5^\circ/\text{hr}$	
Scale factor non linearity	$\leq 20\text{ppm}(1\sigma)$	Room temperature
Scale factor repeatability	$\leq 50\text{ppm}(1\sigma)$	Room temperature
Dynamic range	$\pm 400^\circ/\text{s}$	
Bandwidth	$\geq 500\text{Hz}$	
Operating temperature	$-40^\circ\text{C} \sim +65^\circ\text{C}$	
Storage temperature	$-50^\circ\text{C} \sim +70^\circ\text{C}$	
Vibration condition	4.2g,20Hz~2000Hz	

### External Dimension Drawing

Horizontal dual -axis Fiber Optic Gyroscope instrument Dimensions: 70mm × 70mm × 43mm, installation size: four -hole 62mm × 62 mm, installation screw: 4 M3 screws, the shape and installation size are shown in Figure 2.

