ER-FOG-851 Low cost single axis FOG

Introduction

Low cost single axis FOG is designed with concept of traditional fiber optic gyroscope and adopts matured fiber optic gyroscope manufacturing technology. ER-FOG-851 gyroscope owns characteristics of small volume, light weight, low power consumption, fast start-up, simple operation, convenient to use etc., which are widely used in INS, IMU, positioning system, north seeking system and platform stabilization.

Application

Optical pod/Flight control platform

INS/IMU

Platform stabilization device

Positioning system

North finding instrument

High precise measurement/navigation system and servo system

Specifications

No.	Parameter	ER-FOG-851D	ER-FOG-851H	Unit
1	Measurement range	-800～+800	-500～+500	(°)/s
2	Bias stability	0.05～0.1	≤0.05	(°)/h
3	Bias repeatability	0.05～0.1	≤0.05	(°)/h
4	Scale factor non-linearity(1σ)	≤100	≤50	ppm
5	Scale factor misalignment (1σ)	≤100	≤50	ppm

6	Scale factor repeatability(1σ)	≤100	≤50	ppm
7	Power supply	Single +5	Single +5	V
8	Bandwidth	≥500	≥500	Hz
9	Run-up time	5	5	s
10	Output format	RS422	RS422	/
11	External interface	21PIN	21PIN	/
12	Operating temperature	-40~+60	-40~+60	℃
13	Vibration	6.06, 20~2000	6.06, 20~2000	G(RMS),Hz
14	Dimension	78.5×78.5×35	78.5×78.5×35	mm³
15	Weight	≤300	≤300	g
16	Threshold	≤0.05	≤0.05	(°)/h
17	Random walking coefficient	≤0.005	≤0.005	(°)/h½
18	Impact	100, 6~8	100, 6~8	G, ms
19	Power consumption	≤4	≤4	W