ER-DFOG-50 Low Cost Double Axis FOG Gyroscope

ER-DFOG-50 Low Cost Double Axis Fiber Optic Gyro (FOG) is a very important angular rate sensor, which has the characteristics of long life, fast start up, high precision, lower power consumption, wide dynamic range and so on. The FOG gyros can determine the orientation of moving objects, as an inertial navigation instrument, and it is widely used in modern aviation, navigation, aerospace and defense fields.

Application

Servo tracking、 medium precision INS、 platform stability

High-speed rail track detection、photoelectric pod

Satellite communications

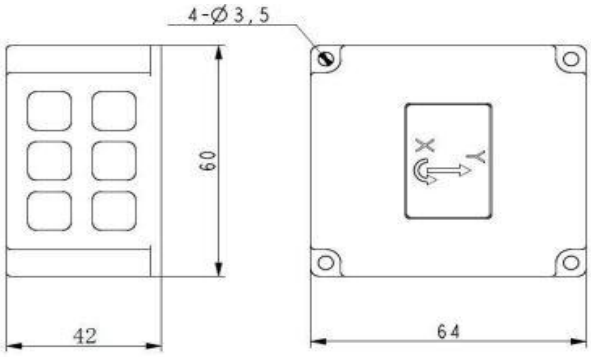
On-the-Move (SOTM)

Unmanned Vehicle

Specifications

Item	Unit	ER-DFOG-50A	ER-D-FOG50B	ER-D-FOG50C	ER-D-FOG50D
Measuring range	º/s	-800~+800	-800~+800	-800~+800	-800~+800
Bias stability	º/h	≤0.3	≤0.5	≤1.0	≤5.0
Bias repeatability	º/h	≤0.3	≤0.5	≤1.0	≤5.0
Random walk coefficient	º/√h	≤0.03	≤0.05	≤0.1	≤0.5
Scale factor non-linearity	ppm	≤ 50	≤ 60	≤70	≤300
Scale factor repeatability	ppm	≤ 50	≤ 60	≤70	≤ 300
Scale factor asymmetry	ppm	≤ 50	≤ 60	≤ 70	≤300
Start Time	s	≤ 1	≤ 1	≤ 1	≤ 1

Bandwidth	Hz	>200	>200	>200	>200
Power supply	V	-5~+5	-5~+5	-5~+5	-5~+5
Power	W	≤ 15	≤ 15	≤ 15	≤ 15
Operating temperature	℃	-40~+65	-40~+65	-40~+65	-40~+65
Storage temperature	℃	-45~+85	-45~+85	-45~+85	-45~+85
Vibration	/	2g (RMS), 20Hz~2000Hz			
Shock	/	40g, 1 ms	40g, 1 ms	40g, 1 ms	40g, 1 ms
Output method	/	RS-422	RS-422	RS-422	RS-422
Connector	/	J30J-15TJL	J30J-15TJL	J30J-15TJL	J30J-15TJL



Note: Unfilled dimensional tolerances are performed in accordance with GB/T1804-2000 Class C.

Figure 1 ER-D-FOG50 A, B, C, D type dual-axis fiber optic gyro dimensions