

## ER-FOG-70 Low Cost FOG Gyros

ER-FOG-70 Low Cost FOG Gyros is an important angular rate sensor, which has the characteristics of long life, fast start up, high precision, lower power consumption and wide dynamic range. It also plays an important role in aerospace, weapon navigation, platform stabilizer, medium precision inertial navigation, unmanned boat and other application fields.

### Applications

Servo tracking、 medium precision inertial navigation、 platform stability

High-speed rail track detection、 photoelectric pod

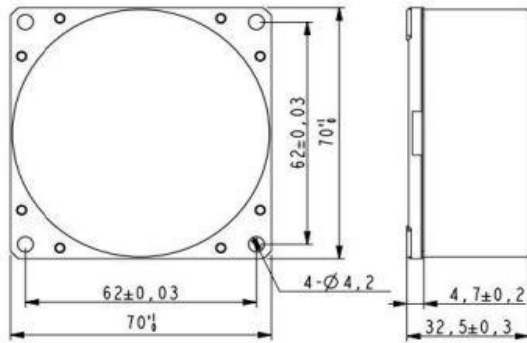
Satellite communications

On-the-move (SOTM)、 unmanned boat

### Specifications

Item	Unit	ER-FOG-70A	ER-FOG-70B	ER-FOG-70C	ER-FOG-70D
Measuring range	%s	-500~+500	-500~+500	-500~+500	-500~+500
Bias stability	%h	≤ 0.05	≤0.1	≤ 0.5	≤ 0.8
Bias repeatability	%h	≤ 0.05	≤0.1	≤ 0.5	≤ 0.8
Random walk coefficient	%√h	≤ 0.005	≤ 0.01	≤ 0.05	≤ 0.08
Scale factor non-linearity	ppm	≤ 50	≤ 60	≤70	≤100
Scale factor repeatability	ppm	≤ 50	≤ 60	≤70	≤ 100
Scale factor asymmetry	ppm	≤ 50	≤ 60	≤ 70	≤100
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	≤18	≤18	≤18	≤18
Operating temperature	°C	-40~+65	-40~+65	-40~+65	-40~+65
Storage temperature	°C	-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/Color line			
Dimensions	mm	Φ70×32	Φ70×32	Φ70×32	Φ70×32



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

Figure 1 Outer dimensions of ER-FOG70A, B, C, and D fiber optic gyroscopes