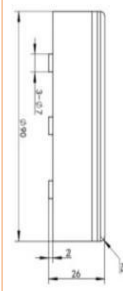
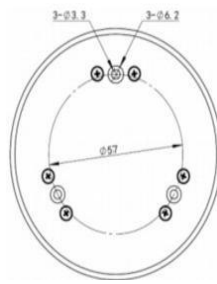


Three-axis integrated fiber optic gyroscope-STG-90H**Product
dimensions**

STG-90H three-axis fiber optic gyroscope is a full solid-state high-precision digital closed loop fiber optic gyroscope integrating optics, mechanics and electricity. Based on the principle of Sagnac, it is composed of erbium-doped fiber light source, fiber coupler, photo detector, integrated optical phase modulator, fiber sensing ring, circuit and structure. Designed for navigation level precision inertial measurement system. It has the characteristics of high reliability and flexible structure. It is a highly customized product produced according to the customer's platform.

■ Product features

Single 5V power supply, low power consumption, excellent all-temperature performance, excellent start-up performance, the nominal index can be reached when the power is turned on, and no Preheating is required, excellent environmental adaptability, strong impact and vibration resistance, interference fringe recognition technology, supporting full dynamic range cold start, high reliability, no dead zone

■ Typical applications

Miniaturized missile-borne inertial navigation system,
attitude indicator,
small compass

Performance indicators

Turn-on time(s)	3	Random walk(/h ^{1/2})	≤0.0005
Dynamic range(°/s)	±300	Scale factor non-linearity(PPM)	≤5
Zero position(°/h)	≤0.3	Scale factor asymmetry(PPM)	≤3
Bias stability(°/h, 1σ, 10S)	≤0.01	Scale factor repeatability(PPM)	≤5
Bias stability(°/h, 1σ, 100S)	≤0.003	Threshold(/h)	≤0.003
Bias stability at variable temperature (/h, 10, 1°C/min)	≤0.01	Resolution(°/h)	≤0.003
Bias repeatability(/h, 1σ)	≤0.003	Bandwidth(Hz)	≥200
Bias magnetic sensitivity(°/h/Gs)	≤0.005		

Physical/Electrical**Environmental adaptability**

Power supply	+5V	Operating temperature	-45°C~+70°C
Steady-state power consumption	≤4.2W	Storage temperature	-55°C~+80°C
Steady-state power consumption at full temperature	≤8W	Vibration	6.06g(RMS), 20Hz-2000Hz
Instantaneous electric current at startup	≤2A	Impact	30g, 6ms-8ms
Dimensions of circuit box	60×60×26mm	Average trouble-free time	8000h
Dimensions of gauge-head	090×26mm		
Weight	<1350g		
Electrical form	RS422		