

HT-80-H/D Series Fiber Optic Gyro

➤ Product characteristics

high accuracy, Small volume, light weight, high reliability,

low power consumption. quick start

High shock and vibration survivability

➤ Product description

HT-80-H/D series are a set of optical, mechanical, electrical integration of solid-state digital closed-loop single-axis fiber optic gyroscope based on the Sagnac (SAGNAC) principle, by the SLD light source, optical fiber coupler, a photodetector, integration optical phase modulators, optical fiber sensing loop, the circuit structure and composition, followed the traditional fiber optic gyroscope classic design, the use of sophisticated manufacturing process FOG, small size, light weight, high accuracy, low power consumption, start fast, simple interface, easy to use and other advantages, is a navigation guidance and control field is very typical of an angular rate sensor, is the world's accuracy is better than 0.05 deg / h fiber optic gyroscope smallest, lightest, very competitive.

➤ Applications

- ◇ SINS/INS
- ◇ integrated navigation system
- ◇ Railway track detection system
- ◇ stabilized platform
- ◇ Antenna Stable Platform
- ◇ navigator
- ◇ North Finder

➤ **Specifications**

Specifications	HT-80-H	HT-80-D
Rate range	-500(°)/s~+500(°)/s	-800(°)/s~+800(°)/s
Bias stability	0.02 (°)/h~0.05(°)/h	0.05 (°)/h~0.1(°)/h
Bias repeatability	0.02 (°)/h~0.05(°)/h	0.05 (°)/h~0.1(°)/h
Scale Factor non-linearity (1σ)	≤50ppm	≤100ppm
scale factor asymmetry (1σ)	≤50ppm	≤100ppm
Scale Factor stability (1σ)	≤50ppm	≤100ppm
Angle random walk	≤0.02(°)/h ^{1/2}	≤0.05(°)/h ^{1/2}
Power dissipation	≤4W	≤4W
Bandwidth	≥500Hz	≥500Hz
Readiness time	5s	5s
Output mode	RS422	RS422
Operating Temp	-40℃~+60℃	-40℃~+60℃
vibration	6.06g(RMS), 20Hz~2000Hz	6.06g(RMS), 20Hz~2000Hz
Shock	100g, 6~8ms	100g, 6~8ms
interface feature	21PIN rectangular connector	21PIN rectangular connector
Overall Dimensions	78.5×78.5×35mm ³	78.5×78.5×35mm ³
weight	≤300g	≤300g

➤ **Outline physical map**



➤ **Fiber Optic Gyro to use**

A) electrical check

Gyroscope each new electrical connections, and deal with the gyro power supply for electrical inspection, to ensure the electrical and electrical point between the housing and there is no short circuit, side Ketong electric.

B) gyroscope through electric

Gyroscope check the electrical connection before the electric connection is correct, you can power.

C) the angular motion information acquisition

In the normal operation of the gyroscope, the gyroscope output can be collected through the 422 serial port.

D) gyro power off

Once the gyroscope is completed, the power supply of the gyroscope can be shut down, and the power down to the next power down time should be at least 3min or more.