

## Fiber optic gyro

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HTS-FB1 Single axis fiber optic gyroscope (FOG) an all solid state high precision angular rate inertial sensor which integrates optics, mechanics and electricity. Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope.

Application: high precision inertial navigation system, positioning and or orientation system, attitude measurement system, servo stabilization system and other fields.



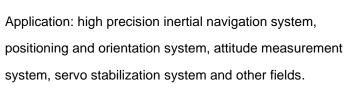
Product Specification		
Range	±300 °/s (adjustable)	
Settling time	≤30 s	
Bias stability (10s smooth)	≤0.015 °/h	
Bias stability 2h continuous test (100s smooth)	≤0.005 °/h	
Bias repeatability, test 6 times	≤0.01 °/h	
Bias stability (full temperature)	≤0.02 °/h	
Bias repeatability (full temperature)	≤0.02 °/h	
Random walk coefficient	≤0.001 °/h¹/2	
Threshold	≤0.005 °/h	
Scale factor non-linearity (room temperature)	≤10 ppm	
Scale factor stability (room temperature)	≤20 ppm	
Scale factor repeatability (full temperature -40~+60 °C)	≤30 ppm	
Operating temperature	-40~+60 °C	
Storage temperature	-50~+70 °C	
Magnetic field sensitivity	≤0.005 °/h /Gauss	
Band width	≥200 Hz	
Dimension	120*120*38 mm	
Power supply	±5 V	
Steady state power consumption (full temperature)	<5 W	
Weight	≤900 g	
Mounting holes distance	94*94 mm	
Mounting holes	4*M6	
Vibration	4.2 g, 20 Hz~2000Hz	
Installation flatness	≤0.01 mm	





HTS-FB2 Single axis fiber optic gyroscope is an all solid state high precision angular rate inertial sensor which integrates optics, mechanics and electricity, Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope

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Product Specification	Model: HTS-FB2	
	El	EII
Range	±450 °/s (adjustable)	±450 °/s (adjustable)
Settling time	≤30 s	≤30 s
Bias stability (10s smooth)	≤0.01 °/h	≤0.03 °/h
Bias repeatability, test 6 times	≤0.01 °/h	≤0.03 °/h
Bias stability (full temperature)	≤0.03 °/h	≤0.05 °/h
Bias repeatability (full temperature)	≤0.03 °/h	≤0.05 °/h
Random walk coefficient	≤0.001 °/h¹/2	≤0.001 °/h <sup>1/2</sup>
Threshold	≤0.005 °/h	≤0.005 °/h
Scale factor non-linearity	≤10 ppm	≤10 ppm
Scale factor stability	≤20 ppm	≤10 ppm
Scale factor repeatability (full temperature -40~+60 °C)	≤50 ppm	≤50 ppm
Operating temperature	-40~+60 °C	-40~+60 °C
	(-55~+85 °C optional)	(-55~+85 °C optional)
Storage temperature	-55~+85 °C	-55~+85 °C
Magnetic field sensitivity	≤0.005 °/h /Gauss	≤0.005 °/h /Gauss





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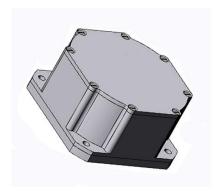
Band width	≥200 Hz	≥200 Hz
Dimension	98*98*35 mm	98*98*35 mm
Power supply	±5 V	±5 V
Steady state power consumption (full temperature)	<5 W	<5 W
Weight	≤530 g	≤530 g
Mounting holes distance	80*80 mm	80*80 mm
Mounting holes	4*M5	4*M5
Vibration	6.06 g, 20 Hz~2000Hz	6.06 g, 20 Hz~2000Hz
Installation flatness	≤0.01 mm	≤0.01 mm





HTS-FB3 Single axis fiber optic gyroscope (FOG) an all solid state high precision angular rate inertial sensor which integrates optics, mechanics and electricity. Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope.

Application: high precision inertial navigation system, positioning and orientation system, attitude measurement system, servo stabilization system and other fields.



Product Specification		
Range	±300 °/s (adjustable)	
Settling time	≤30 s	
Bias stability (10s smooth)	≤0.03 °/h	
Bias stability (100s smooth)	≤0.01 °/h	
Bias repeatability	≤0.01 °/h	
Bias stability (full temperature)	≤0.05 °/h	
Bias repeatability (full temperature)	≤0.03 °/h	
Random walk coefficient	≤0.003 °/h¹/2	
Threshold	≤0.01 °/h	
Scale factor non-linearity	≤10 ppm	
Scale factor stability	≤10 ppm	
Scale factor repeatability (full temperature -40~+60 °C)	≤20 ppm	
Operating temperature	-40~+60 °C (-55~+85 °C optional)	
Storage temperature	-55~+85 °C	
Magnetic field sensitivity	≤0.01 °/h /Gauss	
Band width	≥100 Hz	
Dimension	75*75*42 mm	
Power supply	±5 V	
Steady state power consumption (full temperature)	<4 W	
Weight	≤390 g	
Mounting holes distance	60*60 mm	
Mounting holes	4*M4	
Vibration	4.2 g, 20 Hz~2000Hz	
Installation flatness	≤0.01 mm	





**HTS-FB4** Single axis fiber optic gyroscope is an all solid state angular rate inertial sensor which integrates optics, mechanics and electricity, Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope.



Application: inertial navigation system, positioning and orientation system, attitude measurement system, servo stabilization system and other fields.

Product Specification	Model: HTS-FB4	
	El	EII
Range	±300 °/s	±300 °/s
Settling time	5 s	5 s
Bias stability (10s smooth)	≤0.1 °/h	≤0.3 °/h
Bias repeatability	≤0.1 °/h	≤0.3 °/h
Bias stability (full temperature)	≤0.3 °/h	≤0.6 °/h
Random walk coefficient	≤0.03 °/h¹/2	≤0.03 °/h¹/2
Scale factor non-linearity	≤50 ppm	≤100 ppm
Scale factor stability	≤50 ppm	≤100 ppm
Bias variation during vibration	≤0.2 °/h	≤0.3 °/h
Operating temperature	-40~+60 °C	-40~+60 °C
Storage temperature	-50~+70 °C	-50~+70 °C
Dimension	70*70*32 mm	70*70*32 mm
Power supply	±5 V	±5 V
Steady state power consumption (full temperature)	<4 W	<4 W
Weight	≤290 g	≤290 g
Mounting holes distance	58*58 mm	58*58 mm
Mounting holes	4*M4	4*M4





**HTS-FB5** Single axis fiber optic gyroscope is an all solid state angular rate inertial sensor. Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope.

Application: inertial navigation system, positioning and orientation system, attitude measurement system, servo stabilization system and other fields.



Product Specification	
Range	±300 °/s
Settling time	5 s
Bias stability ( 1 o , 10s smooth) Room temperature	≤0.3 °/h
Bias repeatability (full temperature)	≤0.3 °/h
Random walk coefficient	≤0.03 °/h¹/2
Scale factor non-linearity	≤100 ppm
Scale factor repeatability	≤100 ppm
Operating temperature	-40~+60 °C
Storage temperature	-50~+70 °C
Dimension	60*60*31 mm
Power supply	±5 V
Steady state power consumption (full temperature)	<4 W
Weight	≤200 g
Mounting holes distance	50*50 mm
Mounting holes	4*Ф3.2



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**Product Model: HTS-FB6** 

**HTS-FB6** Single axis fiber optic gyroscope is an all solid state angular rate inertial sensor which integrates optics, mechanics and electricity, Adopting RS422 digital communication mode is convenient for users. It is an ideal inertial device to replace the traditional mechanical gyroscope.



Application: inertial navigation system, positioning and orientation system, attitude measurement system, servo stabilization system and other fields.

Product Specification	Model: HTS-FB6	
	El	EII
Range	±600 °/s	±600 °/s
Settling time	5 s	5 s
Bias stability (10s smooth)	≤0.3 °/h	≤0.5 °/h
Bias repeatability	≤0.3 °/h	≤0.5 °/h
Random walk coefficient	≤0.05 °/h <sup>1/2</sup>	≤0.05 °/h¹/2
Scale factor non-linearity	≤50 ppm	≤50 ppm
Scale factor stability	≤50 ppm	≤50 ppm
Operating temperature	-45~+70 °C	-45~+70 °C
Storage temperature	-50~+80 °C	-50~+80 °C
Dimension	50*50*36.5 mm	50*50*36.5 mm
Power supply	±5 V	±5 V
Steady state power consumption (full temperature)	<4 W	<4 W
Weight	≤170 g	≤170 g

