

BSD50

FIBER OPTIC GYROSCOPE

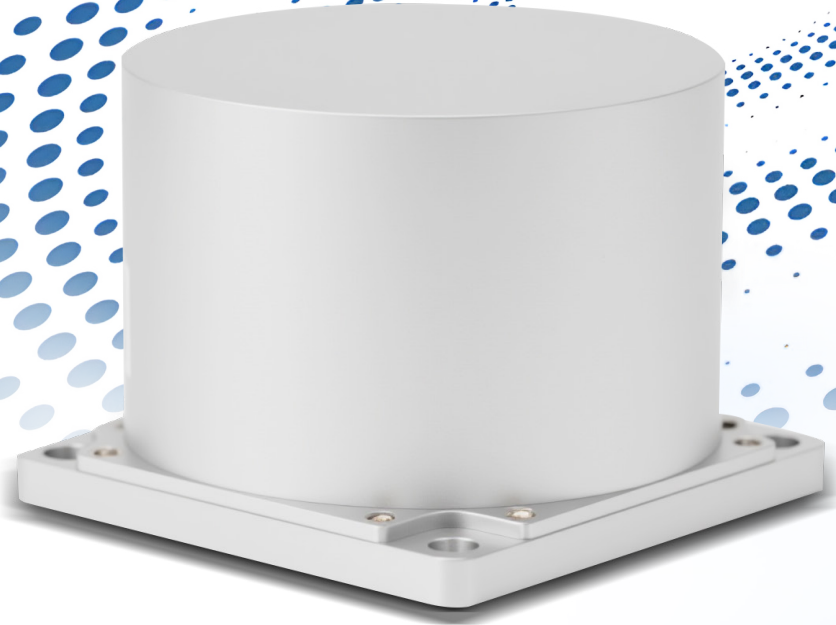
- Digital closed-loop mode, bias stability: 0.05°/h ~ 0.5°/h
- Small size: ϕ 50mm×37.7mm
Light weight: \leq 130g
- High precision, simple structure, wide dynamic range, short start-up time and strong resistance to vibration and shock.

APPLICATIONS



Small IMU, INS , Seeker.

Servo tracking , Electro-optical pod , UAV



PERFORMANCE

Parameters	BSD50A	BSD50B	BSD50C
Input Range	± 1000 °/s	± 1000 °/s	± 1000 °/s
Bias Stability	≤ 0.05 °/h	≤ 0.1 °/h	≤ 0.5 °/h
Bias Repeatability	≤ 0.05 °/h	≤ 0.1 °/h	≤ 0.5 °/h
Random Walk Coefficient	≤ 0.005 ° / \sqrt{h}	≤ 0.01 ° / \sqrt{h}	≤ 0.05 ° / \sqrt{h}
Scale Factor Non-linearity	≤ 50 ppm	≤ 50 ppm	≤ 100 ppm
Scaling Factor Repeatability	≤ 50 ppm	≤ 50 ppm	≤ 100 ppm
Scale Factor Asymmetry	≤ 50 ppm	≤ 50 ppm	≤ 100 ppm
Startup Time		≤ 1 s	
Bandwidth		>200 HZ	
Power Supply		± 5 V (Single power supply -5,+5 available)	
Power		≤ 6 W	
Operating Temperature		- 40 ~ 65 °C	
Storage temperature		- 50 ~ 80 °C	
Vibration		20 ~ 2000 Hz , 0.06 g ² /Hz	
Shock		30 g, 11ms	
Data Refresh Date		200 ~ 2000 Hz	
Baud Rate		115200 ~ 921600 bps	
Output Mode		Broadcast (default) / Triggered (customized)	
Interface		RS-422	
Connector		J30J-15TJL	
Dimensions		50×50×37.7 mm (Can be customized 50×50×25)	
Weight		130 g	

BSD60

FIBER OPTIC GYROSCOPE

- Digital closed loop mode,
Bias stability: 0.05°/h~0.2°/h
- Small size: 60mm×60mm×30mm,
Light weight: ≤160g
- High precision, simple structure, wide dynamic range,
short start-up time, strong resistance to vibration and shock.

APPLICATIONS



Small IMU、INS、Seeker

Servo tracking、Optoelectronic pod、UAV、USV



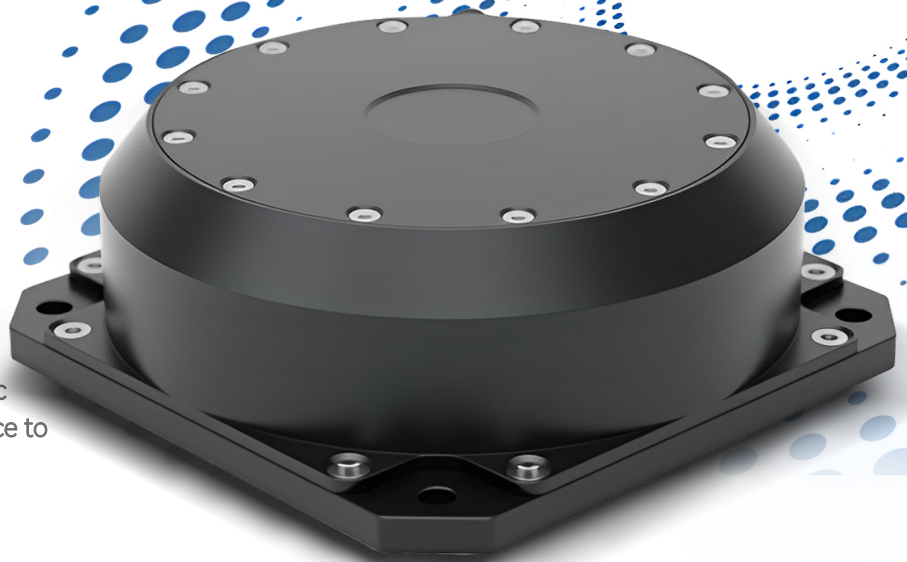
PERFORMANCE

Parameters	BSD60A	BSD60B	BSD60C	BSD60D
Input Range	± 1000 °/s	± 1000 °/s	± 1000 °/s	± 1000 °/s
Bias Stability	≤0.05 °/h	≤ 0.1 °/h	≤ 0.2 °/h	≤ 0.5 °/h
Bias Repeatability	≤0.05 °/h	≤ 0.1 °/h	≤ 0.2 °/h	≤ 0.5 °/h
Random Walk Coefficient	≤0.005 ° / √ h	≤ 0.01 ° / √ h	≤ 0.02 ° / √ h	≤ 0.05 ° / √ h
Scale Factor Non-linearity	≤ 30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Scaling Factor Repeatability	≤ 30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Scale Factor Asymmetry	≤30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Startup Time	≤ 1s			
Bandwidth	>200 Hz			
Power Supply	±5V (Single power supply -5 , +5 available)			
Power	≤2.5 W			
Operating Temperature	- 40 ~ 65°C			
Storage temperature	- 50 ~ 80 °C			
Vibration	20 ~ 2000 Hz , 0.06 g ² /Hz			
Shock	30 g, 11ms			
Data Refresh Date	200 ~ 2000 Hz			
Baud Rate	115200 ~ 921600 bps			
Output Mode	Broadcast (default) / Triggered (customized)			
Interface	RS-422			
Connector	J30J-15TJL			
Dimensions	60×60×30 mm			
Weight	150 g			

BSD98

FIBER OPTIC GYROSCOPE

- Digital closed-loop mode, bias stability: 0.01°/h ~ 0.05°/h, 10s smoothing
- Small size: 98mm×98mm×35mm , light weight: ≤ 550 g
- High precision, simple structure, wide dynamic range, short start-up time and strong resistance to vibration and shock.



APPLICATIONS



High-precision inertial navigation system , vehicle positioning and orientation.

PERFORMANCE

Parameters	BSD98A	BSD98B	BSD98C
Input Range	± 1000 °/s	± 1000 °/s	± 1000 °/s
Bias Stability	≤ 0.01 °/h (10 s)	≤ 0.02 °/h (10 s)	≤ 0.05 °/h (10 s)
Bias Repeatability	≤ 0.01 °/h	≤ 0.02 °/h	≤ 0.05 °/h
Random Walk Coefficient	≤ 0.001 ° / √ h	≤ 0.002 ° / √ h	≤ 0.005 ° / √ h
Scale Factor Non-linearity	≤ 10 ppm	≤ 40 ppm	≤ 50 ppm
Scaling Factor Repeatability	≤ 10 ppm	≤ 40 ppm	≤ 50 ppm
Scale Factor Asymmetry	≤ 10 ppm	≤ 40 ppm	≤ 50 ppm
Startup Time		≤ 1s	
Bandwidth		>200 HZ	
Power Supply		±5V (Single power supply -5,+5 available)	
Power		≤ 6 W	
Operating Temperature		- 40 ~ 65 °C	
Storage temperature		- 50 ~ 80 °C	
Vibration		20 ~ 500 Hz , 0.06 g ² /Hz	
Shock		30 g, 11ms	
Data Refresh Date		200 ~ 2000 Hz	
Baud Rate		115200 ~ 921600 bps	
Output Mode		Broadcast (Default) / Triggered (Customized)	
Interface		RS-422	
Connector		J30J-15TJL	
Dimensions		98×98×35mm	
Weight		550 g	

BSD120

FIBER OPTIC GYROSCOPE

- Digital closed-loop mode, bias stability: 0.006°/h ~ 0.015°/h,
- 10s smoothin Small size:120mm×120mm×35mm, light weight: ≤840g
- High precision, simple structure, wide dynamic range,short start-up time and strong resistance to vibration and shock.

APPLICATIONS



Ultra-precise north-seeking, ultra-high-precision inertial navigation



PERFORMANCE

Parameters	BSD120A	BSD120B
Input Range	± 500 °/s	± 500 °/s
Bias Stability	≤ 0.003°/h (10 s)	< 0.006 °/h (10 s)
Bias Repeatability	≤ 0.003 °/h	≤ 0.006 °/h
Random Walk Coefficient	≤ 0.0003 ° / √ h	≤ 0.0006 ° / √ h
Scale Factor Non-linearity	≤ 2 ppm	≤ 5 ppm
Scaling Factor Repeatability	≤ 2 ppm	≤ 5 ppm
Scale Factor Asymmetry	≤ 2 ppm	≤ 5 ppm
Startup Time	≤ 1s	
Bandwidth	>200 HZ	
Power Supply	±5V (Single power supply -5,+5 available)	
Power	≤ 6 W	
Operating Temperature	- 40 ~ 65 °C	
Storage temperature	- 50 ~ 80 °C	
Vibration	20 ~ 500 Hz , 0.06 g ² /Hz	
Shock	30 g, 11ms	
Data Refresh Date	200 ~ 2000 Hz	
Baud Rate	115200 ~ 921600 bps	
Output Mode	Broadcast (Default) / Triggered (Customized)	
Interface	RS-422	
Connector	J30J-15ZKP	
Dimensions	120×120×35mm	
Weight	840 g	

TBSD60

FIBER OPTIC GYROSCOPE

TRIPLE -AXIS

- Digital closed-loop mode, bias stability : 0.05°/h ~ 0.5°/h
- Small size : 112mm×112mm×77.5mm, lightweight : ≤1200g
- High accuracy , short start-up time, strong resistance to vibration and shock.

APPLICATIONS



Small IMU , INS.

Servo-tracking , Seeker.



PERFORMANCE

Parameters	TBSD60A	TBSD60B	TBSD60C	TBSD60D
Input Range	± 1000 °/s	± 1000 °/s	± 1000 °/s	± 1000 °/s
Bias Stability	≤0.05 °/h	≤ 0.1 °/h	≤ 0.3 °/h	≤ 0.5 °/h
Bias Repeatability	≤0.05 °/h	≤ 0.1 °/h	≤ 0.3 °/h	≤ 0.5 °/h
Random Walk Coefficient	≤0.005 ° / √ h	≤ 0.01 ° / √ h	≤ 0.03 ° / √ h	≤ 0.05 ° / √ h
Scale Factor Non-linearity	≤ 30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Scaling Factor Repeatability	≤ 30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Scale Factor Asymmetry	≤30 ppm	≤ 50 ppm	≤ 80 ppm	≤ 100 ppm
Startup Time	≤ 1s			
Bandwidth	>200 HZ			
Power Supply	+24 V			
Power	≤18 W			
Operating Temperature	- 45 ~ 70 °C			
Storage temperature	- 55 ~ 80 °C			
Vibration	20 ~ 2000 Hz , 0.06 g ² /Hz			
Shock	30 g, 11ms			
Data Refresh Date	200 ~ 2000 Hz			
Baud Rate	115200 ~ 921600 bps			
Output Mode	Broadcast (default) / Triggered (customized)			
Interface	RS-422			
Connecter	J30J-15TJL			
Dimensions	112×112×77.5 mm			
Weight	1200 g			