

# JIOPTICS

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## Fiber Optic Gyroscope FOG Strapdown Inertial Navigation

JIO-FOGD98A model inertial navigation device is a cost-effective inertial navigation and measurement product used to measure the position, velocity, attitude, angular rate and acceleration of the carrier. The device is developed using cost-effective fiber optic gyro and quartz accelerometer, and its performance is guaranteed by high accuracy calibration and compensation of the system. The device is designed according to military standards, and the electromagnetic shielding, thermo-balance, and sealing are fully considered to guarantee excellent environmental performances. Welcome to buy Fiber Optic Gyroscope FOG Strapdown Inertial Navigation from us.

### Fiber Optic Gyroscope FOG Strapdown Inertial Navigation Introduction

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JIOPTICS installation of fiber optic gyroscope to provide ease of integration flexibility, and our developers toolkit to rapid prototyping, not only meet the specification requirements, also provide high-quality performance meet the demand of end users.

### Our services

JIOPTICS is a professional and efficient team. Provide OEM/ODM services for you, contact us to customize your exclusive fiber optical gyroscope

### Features

- Cost-effective fiber optic gyro and quartz accelerometer
- Optional static or moving base self-alignment
- Error parameters calibration and compensation in full temperature range

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Optional diverse input interfaces for GNSS/Odometer/DVL  
Configurable navigation modes  
Excellent environmental suitability  
Military standards

## Applications

Compass for sea vehicle  
Under-water vehicle navigation and positioning  
Positioning and north-finding for land vehicle  
Stabilization and control for moving carrier  
Attitude measurement

## Specification

Performances	Start - Up Time	5min
	Inertial Position	1nm/h, CEP 50
	Inertial Velocity	1m/s, 1 $\sigma$
	Inertial Attitude	0.01deg, 1 $\sigma$
	Inertial Heading	0.06 $\times$ sec(Lat) deg, 1 $\sigma$
	Heave	5cm or 5%
Input Ranges	Angular Rate	$\pm$ 400deg/s
	Acceleration	$\pm$ 20g
Work Environment	Work Temperature	- 10 $^{\circ}$ C~+55 $^{\circ}$ C
	Storage Temperature	- 55 $^{\circ}$ C~+85 $^{\circ}$ C
	Vibration	0.04g <sup>2</sup> /hz @ 20~2000hz
	Shock work / no damage	30g @ 6ms/50g @ 11ms
Electrical Characteristics	Work Voltage	18~36VDC
	Consumption	$\leq$ 15W
	Communication	RS422/RS232/CAN/Ethernet
Physical Characteristics	Size (W x D x H)	280 $\times$ 136 $\times$ 150 mm
	Weight	$\leq$ 6.8kg