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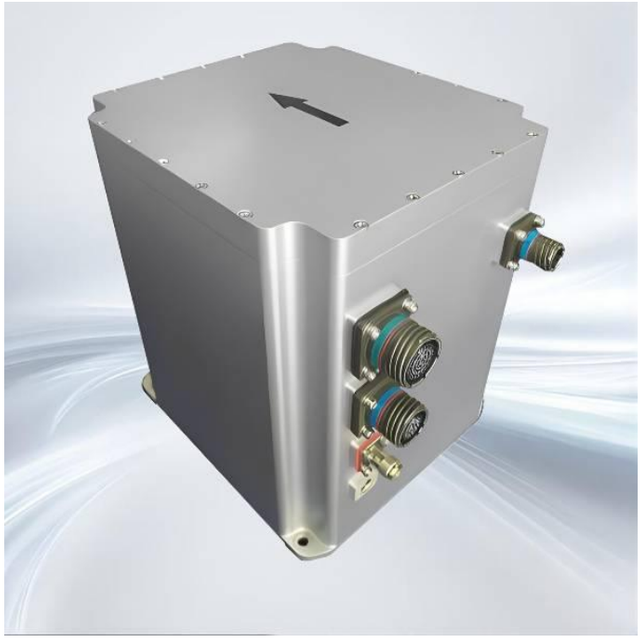

Fiber Optic Gyroscope Fog Satellite Integrated Navigation System

JIO-F100S fiber optic integrated navigation system is composed of high-precision closed-loop fiber-optic gyroscope, quartz Flexible accelerometer and high-end GNSS receiving board, through multi-sensor fusion and guidance Realization of aerial calculation algorithm, providing high-precision navigation attitude,speed and position information to the outside world information to meet high-precision measurement and control requirements. Welcome to buy Fiber Optic Gyroscope Fog Satellite Integrated Navigation System from us.

Fiber Optic Gyroscope Fog Satellite Integrated Navigation System Features

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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

Product Features

- 0.8nmile/h navigation grade accuracy
- Multi-mode selection, vehicle mode/airplane mode
- Static initial alignment 3min / shaking base initial alignment 8min
- Fault self-check

Tel:+86-13570832601 **Email:**sales@jioptics.com

- Rich interfaces, support RS232, RS422, CAN and other standard interfaces
- High reliability

Application scenarios

-Intelligent excavation system in mining area
- Baseline inertial navigation for large UAVs
- marine compass
- self-propelled gun orientation
- Vehicle positioning and orientation
- High precision mobile measurement
- High precision and stable platform

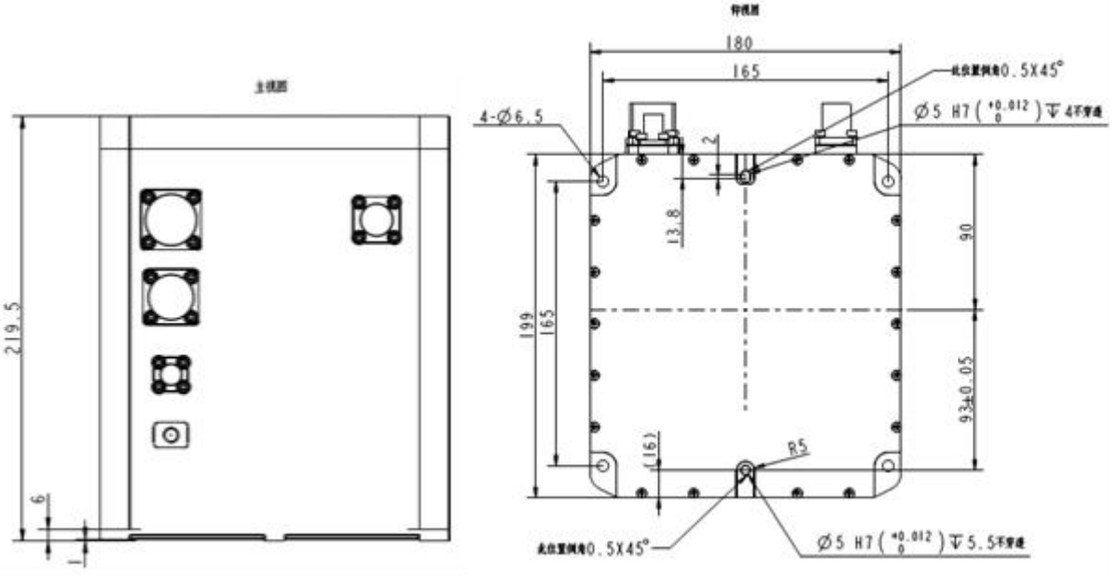
Electrical characteristics

-Delectrical power supply: 24V DC (typical value)
-Reze power: 1.5W (maximum value)
-The ripple: 100mv (peak value)

Electrical Characteristics

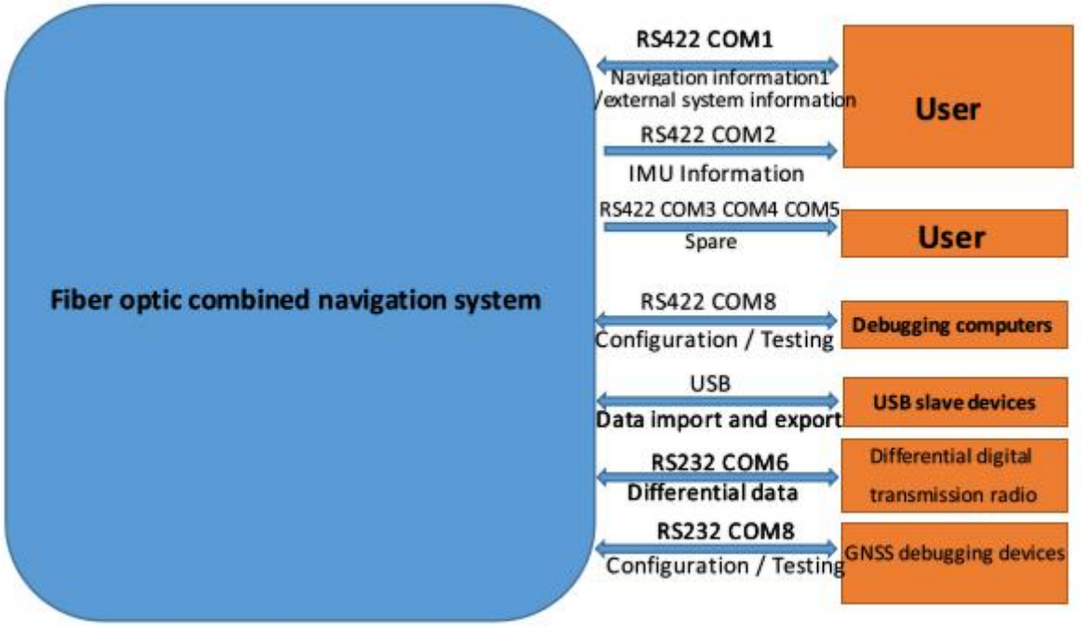
- Power supply: 24~36V DC (typ.)
- Rated power: 30W (max)

Mechanical Dimensions



Technical parameters

Attributes	Parameter	Index
Position hold	Odometer Combo	0.001D (D is mileage)
	GNSS combination	1.2m
	Pure inertia	0.8nmile/h
Attitude accuracy	Initial alignment	0.003°
	Attitude hold (GNSS disabled, pure inertia)	0.002°/10min（RMS）
	Transient power	≤100W (<3s)
Heading accuracy	self-seeking north	0.05°×sec(Lati), where Lati means latitude (RMS)
	Heading hold (GNSS disabled, pure inertia)	0.003°/10min（RMS）
Speed accuracy	Speed hold (GNSS disabled, pure inertia)	0.3m/s/10min（RMS）
Optical fiber Gyro	Measuring range	±400°/s
	Zero bias stability	≤0.01°/h
Quartz Flexible Accelerometer	Measuring range	±20g
	Zero bias stability	≤20μg(10s average)
Communication Interface	RS232	1 channel (baud rate 9.6kbps~921.6kbps, default 115.2kbps Frequency up to 1000Hz, default 200Hz)
	RS422	6 channels (Baud rate 9.6kbps~921.6kbps, default 115.2Kbps Frequency up to 1000Hz, default 200Hz)
Structural properties	Size	199 mm × 180 mm × 219.5 mm (L×W×H)
	Weight	A single set of inertial navigation is not more than 8.0kg (optional for aviation applications is not more than 6.5kg)
Use environment	Storage temperature	-40℃~65℃
	Relative humidity	≤80%


Fiber optic combined navigation system
RS422 COM1
Navigation information1 /external system information
RS422 COM2
IMU Information
User
RS422 COM3 COM4 COM5
Spare
User
RS422 COM8
Configuration / Testing
Debugging computers
USB
Data import and export
USB slave devices
RS232 COM6
Differential data
Differential digital transmission radio
RS232 COM8
Configuration / Testing
GNSS debugging devices