

This product is built-in high-precision three-axis integrated fiber-optic gyro and high-precision quartz flexure accelerometer, which can measure the attitude parameters of the moving carrier (roll angle, pitch angle, angular velocity, acceleration), and ensure the force very high measurement accuracy through nonlinear compensation, quadrature compensation, temperature compensation, and Kalman filter response evaluation.

Features:

- High accuracy, high reliability
- Gyro drift compensation
- Wide temperature range, temperature compensation
- Quadrature compensation, dynamic compensation
- High performance Kalman filtering algorithm

Applications:

- Car Navigation
- Airborne Navigation
- Shipboard Navigation
- Stabilization Control

Specification:

Main Device Characteristic		
Gyroscopes	Range	$\pm 500^\circ/\text{s}$
	Zero Degree Stability (25°C)	$\leq 0.05^\circ/\text{h}$ (10s soomth) , $\leq 0.004^\circ/\text{h}$ (100s平滑)
	Zero bias repeatability	$\leq 0.003^\circ/\text{h}$
	Random walk factor	$\leq 0.0005^\circ/\text{h}$
	Scale factor nonlinearity	$\leq 10\text{ppm}$
	Scale factor repeatability (25°C)	$\leq 10\text{ppm}$
Accelerometers	Range	$\pm 30\text{g}$
	Scale factor	1.0~1.3mA/g
	Zero bias repeatability (1δ)	$\leq 20\mu\text{g}$
	Scale Factor Monthly Repeatability (1δ)	$\leq 20\text{ppm}$
	Bias temperature coefficient (-40°C~+60°C)	$\leq \pm 40\mu\text{g}/^\circ\text{C}$
	Scale Factor Temperature Coefficient (-40°C~+60°C)	$\leq \pm 50\text{ppm}/^\circ\text{C}$
Physical Characteristic	Supply voltage	24VDC (12VDC~36VDC)
	Electric consumption	< 18W
	Operating temperature	-40°C~+70°C
	Storage temperature	-40°C~+85°C
	Impact	70g, 11ms Half-sine shock
	Shock	12.2g, 20Hz~2000Hz broadband randomization
	Communication interface	RS422/RS232/CAN
	Communication rate	115200bps (configure)
	Data update rate	400Hz (configure)
	Dimensions (mm)	118×128×88
Weight (g)	< 1500 (Without housing and top cover)	

The data contained in this document is intended for the use of technical trainers only. The customer's technical department is responsible for assessing the suitability of the product for the intended application and the completeness of the product information given in this document in relation to such application. For further information on products, technology, terms and conditions of delivery and prices, please contact our nearest office (www.senstechxyz.com).

中国大陆
西安鑫源宇通电子科技有限公司
陕西省西安市高新区锦业路70号航
天恒星园区1号厂房一层南
Tel: 400-780-9688
sales@senstechxyz.com

中国香港
深大实业有限公司
香港新界沙田安平街6号新贸易
中心B座13楼06室
Tel: +86 17792099916
info@caltropinstruments.com

新加坡
深大实业有限公司
香港新界沙田安平街6号新贸易
中心B座13楼06室
Tel: +86 17792099919
info@senstechxyz.com



西安鑫源宇通电子科技有限公司 | 400-780-9688
鑫源宇通——专业的传感和系统解决方案供应商

www.senstechxyz.com