BLITZSensor

BS-FN150-M-D6EC is an inertial navigation system (INS) based on fiber-optic gyroscopes
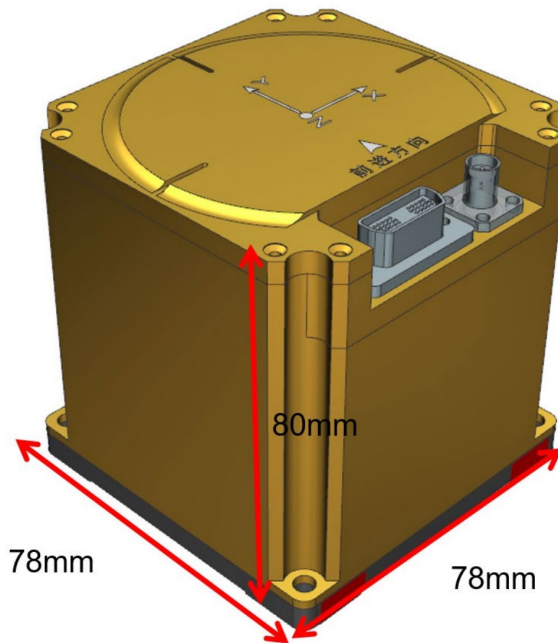
- Fiber-optic gyroscopes and three MEMS acceleromters
- Digital output

Item	Purpose	Indicators	Remark
GYRO	Measuring range	-500°/s ～+500°/s	
	Zero-bias residual	-0.25°/h ～+0.25°/h	
	Random walk	0.05 °/h	
	Zero bias stability at room temperature	≤0.1°/h（1σ）	10 seconds smoothing, 1H test result
	Zero bias stability at full temperature	≤0.15°/h（1σ）	10 seconds smoothing, 1H test result
	Normal-temperature zero-bias repeatability	≤0.1°/h（1σ）	Statistics of 6 test data
	Zero-bias repeatability at full temperature	≤0.15°/h（1σ）	Take 2 zero-bias data at full temperature, high temperature, low temperature and normal temperature respectively
	Scale factor nonlinearity	≤30ppm	Full temperature and constant temperature
	Scale factor repeatability	≤30ppm（1σ）	Full temperature and constant temperature
	Gyro start time	≤5s	
	Gyro bandwidth	300Hz	Design assurance, batch testing
	Installation error residual of three-axis gyroscope	≤80"	

	Item Purpose	Indicators	Remark
ACC	Measuring range	-20g ～ +20g	Design and selection guarantee
	Scale factor nonlinearity	≤300ppm	Design and selection guarantee
	Zero bias stability at full temperature	≤100ug（1σ）	10 seconds smoothing, 1H test result
	Zero-bias repeatability at full temperature	≤100ug（1σ）	Take 2 zero-bias data at full temperature, high temperature, low temperature and normal temperature respectively
	Scale factor repeatability	≤100ppm（1σ）	Design and selection guarantee
	Random walk	≤0.02m/s/h$^{1/2}$	
	Add up the starting time	≤5s	
	Triaxial addition installation error residual	≤80"	

	Item Purpose	Indicators	Remark
Alignment accuracy	Static self-north seeking time	≤5min	
	Heading Angle Alignment Repeatability	≤0.2°	1σ
	Pitch Alignment Repeatability	≤0.05°	1σ
	Roll Angle Alignment Repeatability	≤0.05°	1σ
	North-seeking mode	Optional	Shaking base alignment can be achieved

	Item Purpose	Indicators	Remark
Inertial navigation accuracy	Accuracy of course angle maintenance	≤0.15°/h	
	Pitch Angle Holding Accuracy	≤0.05°/h	
	Accuracy of roll angle maintenance	≤0.05°/h	
	Inertial positioning accuracy	≤10m（300s，3km）	CEP, Carrier Constraint
	Inertial positioning accuracy	≤2000m（15min）	Airborne, error peak-to-peak

80mm

78mm

78mm

安装尺寸：69.5*69.5（4*Ø4.5）