CONCH-80 FIBER OPTIC INERTIAL NAVIGATION SYSTEM

Product introduction

Conch-80 (MFG-IIIU-T380) fiber optic inertial navigation adopts high-precision fiber optic gyro scope and quartz accelerometer. Based on the design technology of gyroscope and system integration, it has the characteristics of small size, high precision and high cost performance, and can provide high-precision heading and attitude information.

Product features

- High precision
- Small size
- Fast start-up
- High cost performance

Application field

Autonomous navigation of small and medium caliber underwater unmanned vehicle;

Autonomous navigation of other carriers.

Parameters

System accuracy	Heading accuracy	≤0.1°secϕ (RMS, pure INS) ≤0.05°secϕ (RMS, GNSS/GPS)
	Attitude accuracy	≤0.01° (RMS,Dynamic)
	Angular velocity accuracy	0.1°/s
	Speed accuracy	0.2m/s (Combined with GNSS)
	Heave	≤5cm or 5%H (Whichever is bigger)
	Position accuracy	≤2%D (Combined with speed log/DVL)
Interface	Output interface	2 x RS422 serial outputs
	Frequency	Output frequency 100Hz (Configurable)
	Output protocol	Customize
Physical features	Dimensions	180mm×160mm×135mm (X,Y,Z)
	Weight	≤5kg
	Input voltage	(DC) 24V±20%
	Power consumption	≤20W
Time	Setting time	≤10min
Environment	Operation temperature	-20℃ ~ +60℃

Dimensions