

BP-III SURVEYING AND MAPPING FIBER-OPTIC INERTIAL NAVIGATION SYSTEM



Product introduction

BP-III(SAM003) is equipped with medium and high precision fiber optic gyroscope, quartz accelerometer and multi-mode satellite navigation receiver. GNSS dual antenna real-time positioning and heading technology, autonomous seeking north technology, inertial navigation technology, integrated navigation technology, can output high-precision position, speed, heading, attitude, angular velocity, acceleration, time and other information.

Product features

Quickly north seeking

Precise time synchronization

Low latency

Application field

Autonomous navigation of various carriers; multi-beam hydrological measurement applications, ocean mapping.

Parameters

System accuracy	Heading accuracy	$\leq 0.01^\circ \text{sec}\phi$ (RMS, pure INS)
	Attitude accuracy	$\leq 0.01^\circ$ (RMS)
	Positioning accuracy	DVL: 1‰D (CEP50)
		Pure INS: 0.6nm/hour[CEP50]
Heave	$\leq 2.5\text{cm}$ or 2.5%H (Whichever is bigger)	
Interface features	Output interface	2 x RS422 serial output
	The data of frequency	Output frequency 200Hz (configurable)
	The output protocol	NMEA0183、Binary、ASCII (custom)
	Baud rate	4800bauds~921600bauds
The input interface	Support DVL、GPS、GNSS	
Physical features	Input voltage	(DC) 12 ~ 32V、24V \pm 10% (Rated)
	Dimensions	180mm \times 160mm \times 135mm (X, Y, Z)
	Power consumption	$\leq 20\text{W}$
	Weight	$\leq 5 \text{ kg}$
Time	Setting time	$\leq 10\text{min}$
Environment	Operation temperature	-20°C ~ +60°C
	Storage temperature	-40°C ~ +70°C