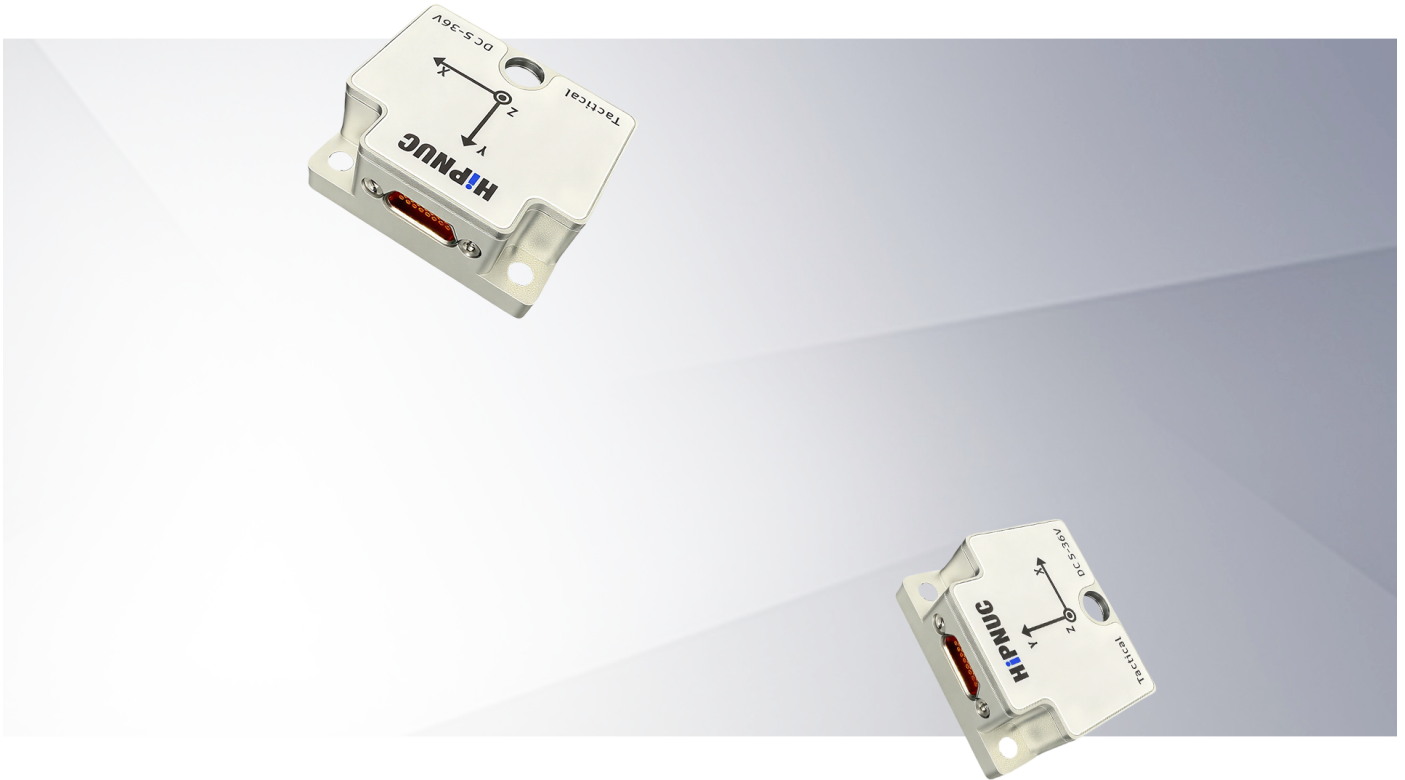


HI70 SERIES

TACTICAL MEMS-IMU/VRU/AHRS



The HI70 series is an IMU/VRU/AHRS sensor composed of MEMS-IMU. Equipped with independently developed adaptive extended Kalman filtering, IMU noise dynamic analysis algorithm, and carrier motion state analysis algorithm, it can provide users with accurate attitude information.

FEATURES

- Compact size, tactical grade
- Multiple communication interfaces: RS232/CAN/RS422
- Temperature compensation and turntable calibration
- Precise IMU/VRU/AHRS fusion with extended Kalman filtering
- Accurate synchronization signals, supporting PPS and GPRMC time synchronization
- High precision maintained under high vibration

APPLICATIONS

Drones
Unmanned Ships
Robots

SPECIFICATIONS

Model

P/N	IMU	VRU	AHRS
HI70T2-MI0-000	√	√	×
HI70T3-MI0-000	√	√	√
HI70T2-MI1-000	√	√	×
HI70T3-MI1-000	√	√	√

Note1: MI0(CAN+2XRS232)
MI1(CAN+RS422)

Fusion Accuracy

Accelerometer	Calibrated
Gyroscope	Calibrated
Pitch/Roll	0.05°
Heading(VRU)	0.1°
Quaternion	Supported

Gyroscope

Range	± 320° /s
Bias Instability	0.3° /h
Bias Stability	0.5° /h
Noise Density	0.0006° /s/ √ Hz
Bandwidth(3dB)	235Hz

Accelerometer

Range	± 16g
Bias Instability	0.01mg
Bias Stability	0.03mg
Noise Density	0.085 mg/ √ Hz
Bandwidth(3dB)	210Hz

Interface

Communication	2XRS232/CAN/RS422
Protocols	Binary/CANopen/J1939
Output Frequency	Up to 1000Hz
SYNC	SYNC_IN、SYNC_OUT

Physical & Environmental

Input Voltage	5-36V
Power Consumption	<400mW
Dimension	44.8X38.6X18.5mm
Weight	55g
Certification	Supports Rohs CE
Temperature	Supports -40-85°C

Software Suite

GUI	CHCenter
SDK	C、STM32、Matlab、Python、Ros
Support	User manuals Data sheet Online communication

QUICK START



The HI70 series can be connected to a PC GUI via a USB-to-RS232 data cable. The GUI assists users in quickly evaluating the product.

HiPNUC SERVICE

We offer free technical support and free firmware upgrades throughout the product lifecycle. The HI70 series comes with a 2-year warranty, ensuring peace of mind for users. You can contact us through the following channels:

1.Email

overseas1@hipnuc.com

2.Web

www.hipnuc.com