HI15 SERIES

Compact EtherCAT MEMS IMU / VRU



The HI02 Series Attitude Sensing System utilizes MEMS inertial sensors to detect object orientation. Featuring proprietary Extended Kalman Filtering and dynamic IMU noise analysis technology, it delivers precise attitude data.

FEATURES

- Compact size, high performance, low cost
- EtherCAT
- Temperature compensation & turntable calibration
- Extended Kalman fusion for precision IMU/VRU

APPLICATIONS



Humanoid

SPECIFICATIONS

Model

P/N	IMU	VRU	AHRS
HI15R2-ECAT-000	\checkmark	\checkmark	×

Fusion Accuracy

Accelerometer	Calibrated
Gyroscope	Calibrated
Pitch/Roll	0.15°
Heading(VRU)	0.3°
Quaternion	Support

Interface

Communication	EtherCAT
Protocols	Binary
Output Frequency	Up to 1000Hz

Gyroscope

Range	± 2000° /s
Bias Instability	1.6° /h
Bias Stability	5° /h
Noise Density	0.01° /s/ √ Hz
Bandwidth(3dB)	Up to 200Hz

Physical & Environmental

Input Voltage	5V-36V
Power Consumption	<1.3W
Dimension	39.1X36X13mm
Weight	25g
Certification	Supports Rohs CE
Temperature	Supports -40-85℃

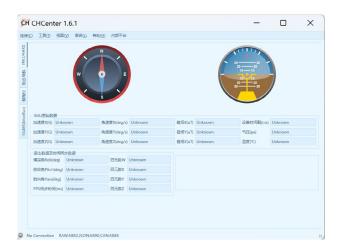
Accelerometer

Range	± 12g
Bias Instability	0.018mg
Bias Stability	0.035mg
Noise Density	0.09 mg/ √ Hz
Bandwidth(3dB)	Up to 200Hz

Software Suite

GUI	CHCenter
Support	Data sheet Online communication

QUICK START



Connect HI15 evaluation boards to PC via USB cable. Use the GUI for rapid product assessment

HIPNUC SERVICE

We provide complimentary technical support and lifetime firmware upgrades. All HI15 products include a 2-year warranty

1.Email overseas1@hipnuc.com

2.Web

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