



HGUIDE N580 INERTIAL/GNSS NAVIGATOR

Honeywell

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The HGuide n580 is a small, lightweight, self-contained, all-attitude Inertial/GNSS Navigator which can be used for a wide variety of platforms, applications and industries where continuous navigation information is a critical component.

The HGuide n580 contains Honeywell's leading edge HG4930 IMU and provides a powerful dual-antenna, multi-frequency, multi-constellation RTK capability. Honeywell's integration expertise blends the IMU and GNSS data to provide an accurate, robust navigation service to your application with all the functionalities that you need.

The HGuide n580 output data includes time stamped position, velocity, angular rate, linear acceleration, roll, pitch and heading information. In dual-antenna mode, the device supports GNSS-based heading measurements and initialization.



Proven - Dependable - Accurate

KEY HONEYWELL ADVANTAGES

- Honeywell proven navigation algorithms for Air, Land, and Sea
- World class inertial sensor development, calibration, and compensation
- Proven reliability, dependability, and ruggedness
- Accepts RTCM3 GNSS corrections
- **Highest performing Inertial/GNSS navigator of its size, weight, and price**
- Configuration flexibility. Only purchase the features you need.
- Multiple configurable communication ports
- The HGuide n580 is not ITAR controlled. Its Export Control Classification Number (ECCN) is 7A994.

HGUIDE n580 TYPICAL KEY CHARACTERISTICS

GNSS Capability (Varies by Configuration)	SBAS, Post-Processed Kinematic (PPK), and RTK mode options Single or Dual Antenna capable
GNSS Signals (Varies by Configuration)	GPS L1 C/A, L1C, L2C, L2P, L5; GLONASS L1 C/A, L2 C/A, L2P, L3, L5; BeiDou B1, B2; Galileo E1, E5 AltBOC, E5a, E5b; NavIC (IRNSS) L5; SBAS L1, L5 QZSS L1 C/A, L1C, L2C, L5; L-Band up to 5 channels
Supply Voltage/Power Consumption	+9VDC to +36VDC / 7 Watts (Varies by Configuration)
Weight/Volume	495g (1.1 lbs) / 324 cm ³ (19.8 in ³), ~9 cm x 6cm x 6cm
Operating Temperature Range	-40°C to +71°C
Compliance	IP68, FCC, ISED, CE, RoHS, WEEE
Communication Ports	Navigation Interface, RS-422 and 5 VDC CMOS (Configurable) RTCM3 Correction - RS422 and RS232 (Configurable)
Discrete Signals	PPS 5V CMOS Output (Supports Lidar Integration)

HGUIDE n580 NAVIGATION PERFORMANCE

POSITION		VELOCITY	HEADING ¹	PITCH/ROLL
Horizontal (m, 1 σ)	Vertical (m, 1 σ)	(m/s, 1 σ)	(°, 1 σ)	(°, 1 σ)
0.01 RTK 0.6 SBAS	0.025 RTK 0.6 SBAS	< 0.015	< 0.01	0.015

¹In dual antenna mode with 2m baseline; longer baselines improve performance

HGUIDE n580 RTK DUAL ANTENNA PERFORMANCE - GNSS OUTAGES WITH NO AIDING²

RMS Error	3 Seconds	10 Seconds	30 Seconds
Horizontal (meter)	0.09	0.2	1
Vertical (meter)	0.045	0.1	0.5
Heading (degree)	0.06	0.07	0.08
Horizontal Velocity (meters/s)	0.015	0.04	0.08
Vertical Velocity (meters/s)	0.01	0.02	0.03

²Odometer and velocity aiding available. Accuracy dependent upon custom device accuracy.

HGUIDE n580 STANDARD CONFIGURATIONS

For More Information

aerospace.honeywell.com/HGuide

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WHAT
WE
MAKE IT

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