



## **HGUIDE n580 INERTIAL/GNSS NAVIGATOR**

Aerospace performance. Industrial prices.

Possibilities of Navigation. *Made Easy.*

# HGUIDE n580 INERTIAL/GNSS Navigator



Proven - Dependable - Accurate

The HGuide n580 is a small, light-weight, self-contained, all-attitude Inertial/GNSS Navigator which can be used in 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 technology 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.

## 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.

## Find Out More

Visit us at: [aerospace.honeywell.com/n580](http://aerospace.honeywell.com/n580)

## Honeywell Aerospace

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HGUIDE n580 TYPICAL KEY CHARACTERISTICS	
<b>GNSS Capability (Varies by Configuration)</b>	SBAS, Post-Processed Kinematic (PPK), and RTK mode options Single or Dual Antenna capable
<b>GNSS Signals (Varies by Configuration)</b>	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
<b>Supply Voltage</b>	+9VDC to +36VDC
<b>Power Consumption</b>	7 Watts (Varies by Configuration)
<b>Weight</b>	495g (1.1 lbs)
<b>Volume / Size</b>	324 cm <sup>3</sup> (19.8 in <sup>3</sup> ), 9cm x 6cm x 6cm (Not Including Mounting Feet)
<b>Operating Temperature Range</b>	-40°C to +71°C
<b>Packaging Rating</b>	IP68
<b>Communication Ports</b>	Primary Navigation Interface, 1MBit, RS-422 Secondary Navigation Interface, 1MBit, 5V CMOS RTCM3 Corrections Interface, 115.2KBit, RS-422
<b>Discrete Signals</b>	PPS 5V CMOS Output

HGUIDE n580 NAVIGATION PERFORMANCE			
POSITION ACCURACY		HEADING ACCURACY <sup>1</sup>	PITCH/ROLL ACCURACY
Horizontal (m, 1σ)	Vertical (m, 1σ)	(°, 1σ)	(°, 1σ)
0.01 RTK 0.6 SBAS	0.025 RTK 0.6 SBAS	0.05	0.015

HGUIDE n580 RTK DUAL ANTENNA PERFORMANCE - GNSS OUTAGES WITH NO AIDING			
RMS Error	3 Second	10 Second	30 Second
Horizontal (meter)	0.09	0.2	1
Vertical (meter)	0.045	0.1	0.5
Heading (degree)	0.06	0.07	0.08

HGUIDE n580 STANDARD CONFIGURATIONS										
Marketing Part Number	Honeywell Part Number	RF INPUTS		POSITIONING SERVICES			CONSTELLATIONS			
		1RF	2RF	SBAS	PPK	RTK	GPS	GLO	GAL	BD
n580-A111	68910580-A111	x		x			x			
n580-A113	68910580-A113	x		x			x	x		
n580-A117	68910580-A117	x		x			x	x	x	x
n580-A125	68910580-A125	x		x	x		x	x		x
n580-A153	68910580-A153	x		x	x	x	x	x		
n580-A223	68910580-A223		x	x	x		x	x		
n580-A227	68910580-A227		x	x	x		x	x	x	x
n580-A253	68910580-A253		x	x	x	x	x	x		
n580-A255	68910580-A255		x	x	x	x	x	x		x
n580-A257	68910580-A257		x	x	x	x	x	x	x	x

<sup>1</sup> In dual antenna mode with 2m baseline; longer baselines improve performance