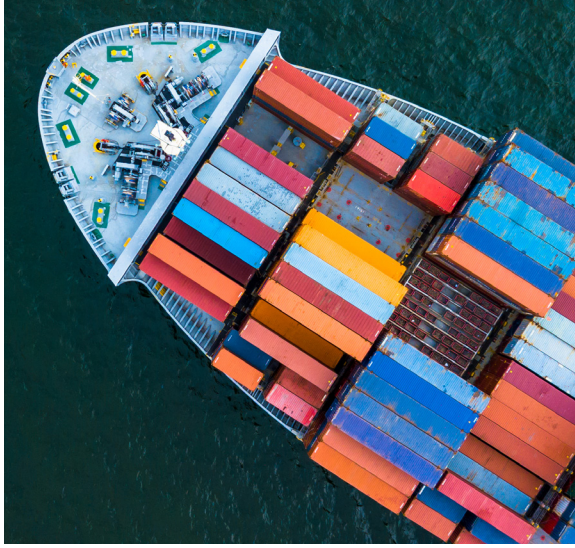

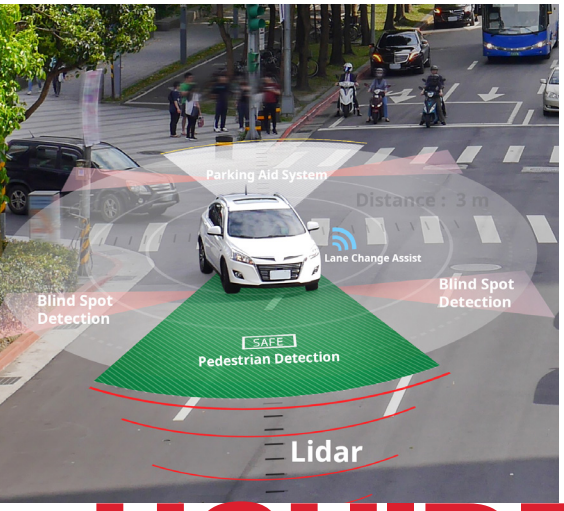

HGUIDE N580
INERTIAL/GNSS NAVIGATOR

Honeywell

HGUIDE N580 INERTIAL/GNSS NAVIGATOR

The HGuide n580 is a small, lightweight, self-contained, all-attitude Inertial/GNSS Navigator for applications where accurate, continuous position and attitude navigation data is required even during regular prolonged GNSS outages.

Proven - Dependable - Accurate

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 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.
- Accurate attitude performance that provides better quality navigation trajectories.
- The HGuide n580 is not ITAR controlled. Its Export Control Classification Number (ECCN) is 7A994.

HGUIDE n580 TYPICAL KEY CHARACTERISTICS

GNSS Capability	SBAS, PPK, and RTK mode options, Single or Dual Antenna Capable
GNSS Signals	GPS L1, L2, L5; GLONASS L1, L2, L3; BeiDou B1, B2; Galileo E1, AltBOC, E5a, E5b; NavIC (IRNSS) L5; SBAS L1, L5 QZSS L1,L2, L5
Time to First Fix / Signal Reacquisition	Cold Start, < 45 Seconds: Hot Start, < 20 Seconds / < 1 Second Due To Momentary Outages
Shock / Vibration	40 G for 11 msec (MIL-STD-810G) / Random 7.7 g's RMS, 20-2000 Hz
Supply Voltage / Power Consumption	+9VDC to +36VDC / 7 Watts
Weight / Volume	495g (1.1 lbs) / 324 cm^3 (19.8 in^3), ~9 cm x 6cm x 6cm
Temperature	-40° C to +71° C (0.8° C/min Max) Operating -54° C to +85° C (3° C/min Max) Non-Op
Regulatory	FCC, ISED, CE, RoHS, WEEE
Submersion (Non-Operating)	2 Meters for 24 Hours (IEC 60529 IP68)
Communication Ports	RS-422 (2x), 5V CMOS, RS-232
Discrete Signals	System & GPS Time Marks, User Event In (2), 1 PPS Event In Marker, Supports Lidar

HGUIDE n580 NAVIGATION PERFORMANCE

POSITION		VELOCITY		HEADING[1]	PITCH/ROLL
Horizontal (m, 1σ)	Vertical (m, 1σ)	Horizontal (m, 1σ)	Vertical (m, 1σ)	(°, 1σ)	(°, 1σ)
0.01 RTK 0.6 SBAS	0.025 RTK 0.6 SBAS	< 0.015	< 0.01	< 0.05	0.015

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

HGUIDE n580 RTK DUAL ANTENNA PERFORMANCE - GNSS OUTAGES WITH NO AIDING[2]

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

[2]Results in table do not include use of any aiding. However, the unit is capable of accepting numerous aiding types (including odometer and velocity aiding).

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-A157	68910580-A157	X		X	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

For More Information
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N61-1863-000-001 | 02/20

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