





## <section-header>

Honeywell

## **HGUIDE N380** INERTIAL/GNSS NAVIGATOR



Proven - Dependable - Accurate

The HGuide n380 is an incredibly small, lightweight, self-contained, all-attitude Inertial/GNSS Navigator designed for applications where robust, continuous position and attitude navigation data is required.

The HGuide n380 contains Honeywell's leading edge i300 inertial measurement unit (IMU) and provides a powerful dual-antenna, multi-frequency, multiconstellation 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 n380 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 n380 is not ITAR controlled. Its Export Control Classification Number (ECCN) is 7A994.

HGUIDE n380 TYPICAL KEY CHARACTERISTICS				
GNSS Capability	SBAS, PPK, 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; NavlC (IRNSS) L5; SBAS L1, L5 QZSS L1, L2, L5;			
Time to first fix/Signal reacquisition	Cold Start, < 45 Sec: Hot Start, < 20 Sec / < 1 Second Due to Momentary Outages			
Shock/Vibration	40 g for 11 msec (MIL-STD-810G) / Random 2.2g's RMS 20-2000 Hz			
Supply voltage/Power consumption	+9VDC to +36VDC / 3.5 Watts			
Weight/Volume	320 g (0.77 lbs) / 260 cm³ (15.9 in³), ~9cm x 6cm x 4.8cm			
Temperature (op/non-op)	-40°C to +71°C (0.8°C/min Max) / -54°C to 85°C (3°C/min Max)			
Regulatory	FCC, ISED, CE, RoHS, WEEE			
Submersion (non-op)	2 Meters for 24 Hours (IEC 60529 IP68)			
Communication Ports	RS-422 (2x), 5V CMOS, RS-232, USB, Ethernet (10/100)			
Discrete Signals	System & GPS Time Marks, User Event In (2), 1 PPS Event in Marker, Supports Lidar			
Internal Data Storage	16 GB, USB 2.0 Access			
LED Status Indicators	Power, GNSS, Navigation, Data Logging			



HGUIDE n380 NAVIGATION PERFORMANCE							
POSITION		VELOCITY		HEADING <sup>1</sup>	PITCH/ROLL		
Horizontal (m, 1σ)	Vertical (m, 1ơ)	Horizontal (m, 1σ)	Vertical (m, 1ơ)	(°, 1σ)	(°, 1σ)		
0.01 RTK 0.6 SBAS	0.025 RTK 0.6 SBAS	< 0.015	< 0.01	< 0.08	0.03		
In dual antenna mod	le with 2m baseline; lor	nger baselines improv	e performance.			6	
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HGUIDE n380 RTK DUAL ANTENNA PERFORMANCE							
RMS Error	3 Seconds	10 Seconds	30 Seconds				
Horizontal (meter)	0.12	0.3	2.5				
Vertical (meter)	0.060	0.2	0.75				
Heading (degree)	0.10	0.125	0.15				
Horizontal Velocity (meters/s)	0.030	0.08	0.16				
Vertical Velocity (meters/s)	0.02	0.04	0.06				

<sup>2</sup> 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). 

Marketing Part NumberHoneywell Part NumberRF INPUTSPOSITIONING SERVICES1RF2RFSBASPPKRTKGPSn380-A11368910380-A113XIXXXn380-A12568910380-A117XIXXXXn380-A12568910380-A125XIXXXXXn380-A15368910380-A153XIXXXXXn380-A15368910380-A153XIXXXXXn380-A15768910380-A157XIXXXXXn380-A22368910380-A157XIXXXXXn380-A22368910380-A223IXXXXXXn380-A22368910380-A223IXXXXXX	CONSTELLATIONS
n380-A117   68910380-A117   X   X   X   X   X   X   X     n380-A125   68910380-A125   X   X   X   X   X   X   X     n380-A125   68910380-A125   X   X   X   X   X   X     n380-A153   68910380-A153   X   X   X   X   X   X     n380-A157   68910380-A157   X   X   X   X   X   X     n380-A157   68910380-A157   X   X   X   X   X   X     n380-A223   68910380-A223   X   X   X   X   X   X     n380-A227   68910380-A227   X   X   X   X   X   X	GLO GAL BD
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	X X X
<b>n380-A253</b> 68910380-A253 X X X X X X	X
<b>n380-A255</b> 68910380-A255 X X X X X X	X X
<b>n380-A257</b> 68910380-A257 X X X X X X	x x x



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