HGUIDE n580 INERTIAL/GNSS NAVIGATOR
Aerospace performance. Industrial prices.
HGUIDE n580 INERTIAL/GNSS Navigator

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.

Proven - Dependable - Accurate

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, E5a, E5b, NavIC (IRNSS) L5; SBAS L1, L5 QZSS L1 C/A, LL3, L2C, L5; L-Band up to 5 channels

- **Supply Voltage:** +9VDC to +36VDC
- **Power Consumption:** 7 Watts (Varies by Configuration)
- **Weight:** 495g (1.1 lbs)
- **Volume / Size:** 324 cm³ (19.8 in³), 9cm x 6cm x 6cm (Not Including Mounting Feet)
- **Operating Temperature Range:** -40°C to +71°C
- **Packaging Rating:** IP68
- **Communication Ports:**
  - Primary Navigation Interface, 1MBit, RS-422
  - Secondary Navigation Interface, 1MBit, 5V CMOS
  - RTCM3 Corrections Interface, 115.2KBit, RS-422
- **Discrete Signals:** PPS 5V CMOS Output

HGUIDE n580 NAVIGATION PERFORMANCE

- **POSITION ACCURACY**
- **Horizontal (m, 1σ):** 0.01 RTK, 0.6 SBAS
- **Vertical (m, 1σ):** 0.025 RTK, 0.6 SBAS

- **HEADING ACCURACY**
- **(°, 1σ):** 0.05
- **(°, 1σ):** 0.015

- **PITCH/ROLL ACCURACY**
- **(°, 1σ):** Not applicable

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

- **RMS Error**
  - 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:**
  - n580-A111 68910580-A111
  - n580-A113 68910580-A113
  - n580-A117 68910580-A117
  - n580-A125 68910580-A125
  - n580-A153 68910580-A153
  - n580-A223 68910580-A223
  - n580-A227 68910580-A227
  - n580-A253 68910580-A253
  - n580-A255 68910580-A255
  - n580-A257 68910580-A257

- **RF INPUTS:**
  - 1RF, 2RF

- **POSITIONING SERVICES:**
  - SBAS, PPK, RTK

- **CONSTELLATIONS:**
  - GPS, GLONASS, GALILEO

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