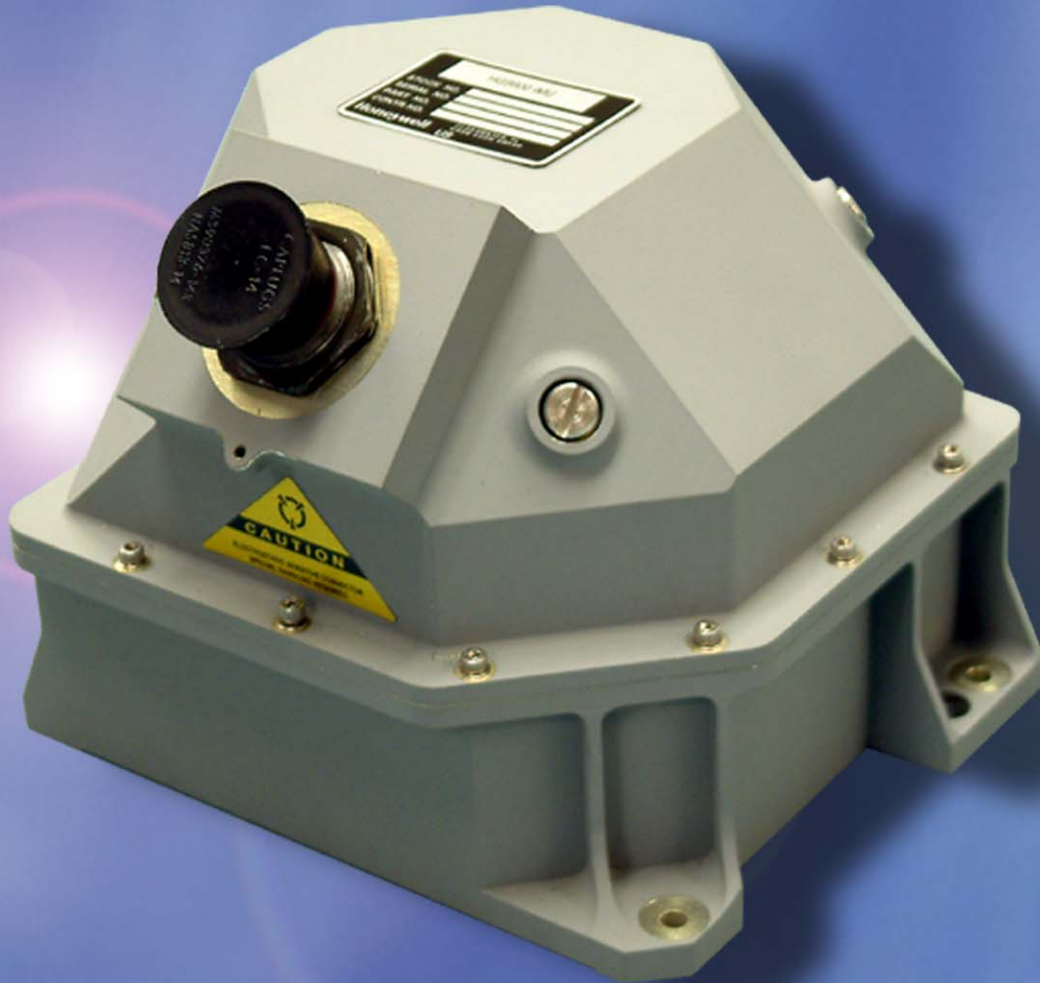




HG9900 NAVIGATION-GRADE
INERTIAL MEASUREMENT UNIT (IMU)

**State-of-the-art navigation performance
using proven inertial sensor technology in a
small, lightweight package**

HG9900 IMU

PROVIDING NAVIGATION-GRADE PERFORMANCE WITH PROVEN INERTIAL SENSOR TECHNOLOGY IN A SMALL, LIGHTWEIGHT PACKAGE TO MEET THE EVOLVING NEEDS OF OUR AEROSPACE CUSTOMERS

System Features

Inertial Measurement Unit (IMU)

- Honeywell GG1320AN Digital Laser Gyros
- Honeywell QA2000 Accelerometers
- Honeywell Smart Inertial Electronics
- Proven 0.8 nmi/hr performance

IMU Processor

- TI DSP TMS320VC33 (60 Mips)
- 128 Kbytes SRAM, 512 Kbytes Flash EEPROM

Standard I/O

- SDLC RS-422
- 300 Hz filtered angular rate and linear acceleration (other frequencies available)
- 300 Hz compensated ΔV s and $\Delta \Theta$ s (other frequencies available)

Power Input

- 5, ± 15 Vdc input

System Characteristics

Size

- < 103 cubic inches (5.5 x 6.4 x 5.34" including connector & mounting holes)

Power Requirement

- < 10 watts

Weight

- < 6.5 lbs.

Thermal Operating Range

- -54°C to +71°C

Gyro

Error Coefficients (1 Sigma)

- Bias: <0.003 deg/hr
- Random Walk: <0.002 deg/ $\sqrt{\text{hr}}$
- Scale Factor: <5.0 PPM

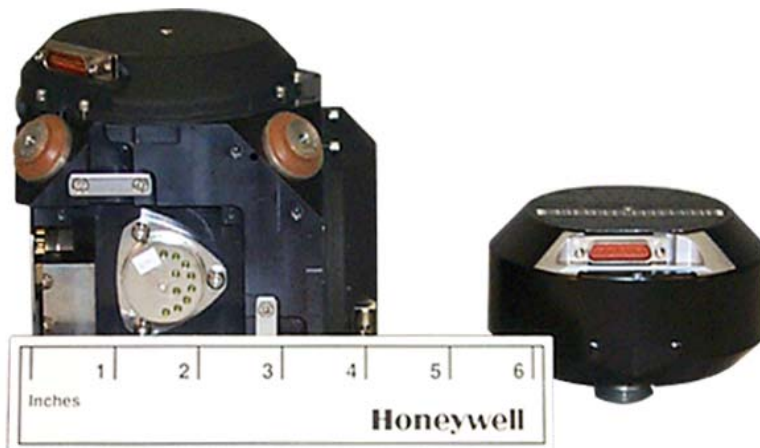
Accelerometer

Error Coefficients (1 Sigma)

- Bias: <25 μg
- Scale Factor: < 100 PPM



HG9900 IMU



NAV100™ ISA

RLG

Aerospace Electronic Systems

Defense & Space Electronic Systems

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