## Reduce operating costs with spectacular reliability



Lowest cost of ownership with thin and light MEMS AHRS

Honeywell

Honeywell's new AH-1000 is a Micro Electro Mechanical System (MEMS) Attitude and Heading Reference System (AHRS) designed to serve as the AHRS of choice for commercial aerospace primary or secondary attitude and heading systems

# **AH-1000**

The AH-1000 AHRS has been designed to provide unparalleled reliability and performance with significantly reduced size and weight compared to similar systems. This allows the AH-1000 to provide the lowest total cost of ownership experience for an ARINC-705 AHRS.



#### **Benefits**

- ARINC-705 AHRS capability in a smaller and lighter form factor, significantly less than comparable systems, reduces operational costs
- Extraordinarily reliable with estimated >30,000 hour Mean Time Between Failure (MTBF)
- Most accurate attitude and heading MEMS AHRS available on the market today including TSO C5f for directional gyro mode
- Full digital interface using proven Honeywell Aerospace MEMS technology
- Interfaces with Honeywell's KMG70103-axis solid state magnetometer
- Aircraft Personality Module (APM) stores aircraft-specific information, installation options, and calibration data

### **Find Out More**

For more information on Honeywell's AH-1000 AHRS and other inertial products, visit www.honeywell/aero

### **Honeywell Aerospace**

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### CHARACTERISTICS

| Attitude Operational Modes (2) | Normal Mode with TAS aiding, and<br>Basic Mode without TAS aiding   |
|--------------------------------|---|
| Attitude (Dynamic)             | 1.0 degree normal mode     2.0 degree basic mode  |
| Attitude (Static)              | 0.5 degree normal mode<br>1.0 degree basic mode   |
| Heading Operational Modes (2)  | Magnetic Mode: Heading slaved to magnetic sensor, and Free drift directional gyro (DG) mode   |
| Heading (Dynamic)              | 2.0 degree magnetic mode     10.0 degree/hour DG mode (5 degree/hour typical DG mode)   |
| Alignments (2)                 | On-ground alignments of 15 seconds, and In-Air quick alignment of 5 seconds   |
| Reliability                    | >30,000 hour MTBF   |
| Certifications                 | Suitable for applications requiring Design Assurance Level (DAL) A Software – DO-178B Level A (maintenance Level D) Hardware – DO-254 Level A Environmental – DO-160F |
| TSO/ETSO                       | TSO C3e, C4c, C5f, C6e (ETSO C3d, C4c, C5e, C6e)  |
| Interfaces                     | ARINC 429 and discrete I/O CAN bus (magnetometer) I <sup>2</sup> C (Aircraft Personality Module)  |
| Connector                      | Standard MIL-DTL-38999 Type III circular  |
| Size                           | 2.5 x 5.0 x 7.8 inches (97 cubic inches)<br>63.5 x 127 x 198.12 mm (1598 cubic cm)  |
| Weight                         | 3.2 lbs (1.45 kg)   |
| Power                          | 12W max @ 28 VDC (8W typical)   |
| Cooling                        | Passive   |

Accuracies are two sigma or 95%



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