AHRS
ATTITUDE & HEADING REFERENCE SYSTEM

- Roll, Pitch and Heading Angle in Dynamic Environments
- Enhanced Performance Kalman Filter Algorithm
- High Stability MEMS Sensors
- High Range Gyro and Accel Options
- EMI & Vibration Resistant

Applications
- UAV/RPV Control
- Platform Stabilization
- Avionics

AHRS400CC

The Crossbow AHRS400CC is a high performance, solid-state attitude and heading reference system intended for airborne applications such as UAV control, Avionics, and Platform Stabilization. This high reliability, strap-down inertial subsystem provides attitude and heading measurements with static and dynamic accuracy that exceeds traditional spinning mass vertical and directional gyros.

This AHRS400CC series product builds on the performance of the AHRS400CB series. It features higher performance sensors, including new silicon MEMS gyroscopes with wider bandwidth and improved bias stability. New design features in the AHRS400CC Series reduce sensitivity to vibration and EMI.

The AHRS400CC achieves its excellent performance by employing proprietary Kalman Filter algorithms to determine stabilized roll, pitch, and heading angles in static and dynamic conditions. The Kalman Filter implementation results in a continuous on-line gyro bias calibration, and an adaptive attitude and heading measurement that is stabilized by the long term gravity and magnetic north references. Output data is provided in both analog and digital (RS-232) formats.

Each Inertial System comes with a User’s Manual offering helpful hints on programming, installation, and product information. In addition, Crossbow’s GYRO-VIEW software is included to assist you in system development and evaluation, and allows you to perform data acquisition.
## Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Gyro (°/sec)</th>
<th>Accel (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRS400CC-100</td>
<td>Attitude &amp; Heading Reference System</td>
<td>± 100</td>
<td>± 2</td>
</tr>
<tr>
<td>AHRS400CC-200</td>
<td>Attitude &amp; Heading Reference System</td>
<td>± 200</td>
<td>± 10</td>
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</tbody>
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**CALL FACTORY FOR OTHER CONFIGURATIONS**

**Notes**
1. All DAC analog outputs are fully buffered and are designed to interface directly to data acquisition equipment. Specifications subject to change without notice.