The Air Data Unit features very high accuracy temperature calibrated pitot and static air data sensors and outputs data over RS232.

It can be used standalone, or connected to an Advanced Navigation INS product for outstanding navigation accuracy in fixed wing aircraft when GNSS is not available.

**TEMPERATURE CALIBRATED PRESSURE SENSORS**

The Air Data Unit features very high accuracy absolute and differential pressure sensors. These are factory calibrated over a wide temperature range to further increase measurement accuracy and provide the best air data possible through varying conditions.

**POWER UP SELF-CALIBRATION**

On top of factory temperature calibration, every time the air data unit powers up, it performs a self excitation calibration to adjust for small deviations of bias and scaling error. This allows the system to compensate for calibration ageing and means that it never needs to be returned to the factory for recalibration.

**RELIABILITY**

The Air Data Unit is built on top of a safety oriented real time operating system and all software is designed and tested to safety standards with fault tolerance. Its communication interface is optically isolated and the hardware is designed and tested to MIL spec.
### HADWARE

- **Operating Voltage** 5 to 36 V
- **Input Protection** ±40 V
- **Power Consumption** (Typical) 0.075 W
- **Operating Temperature** -20 to 85 °C
- **Environmental Protection** IP67, MIL-STD-810G
- **Shock Limit** 100 g
- **Dimensions** 48x42x32 mm
- **Weight** 55 grams

### COMMUNICATION

- **Interface** RS232
- **Interface Isolation** Optically Isolated
- **Speed** 115200 baud
- **Protocol** AN Packet Protocol
- **Output Data Rate** 20 Hz

### SENSORS

<table>
<thead>
<tr>
<th>SENSOR</th>
<th>LOW SPEED VARIANT</th>
<th>STANDARD VARIANT</th>
<th>HIGH SPEED VARIANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Airspeed</td>
<td>63 m/s</td>
<td>225 m/s</td>
<td>420 m/s</td>
</tr>
<tr>
<td>Minimum Valid Airspeed</td>
<td>8.0 m/s</td>
<td>20 m/s</td>
<td>48 m/s</td>
</tr>
<tr>
<td>Airspeed Accuracy</td>
<td>0.5 m/s</td>
<td>1.0 m/s</td>
<td>2.0 m/s</td>
</tr>
<tr>
<td>Altitude Accuracy (turn on to turn on)</td>
<td>18 m</td>
<td>18 m</td>
<td>18 m</td>
</tr>
<tr>
<td>Altitude Accuracy (in run)</td>
<td>1.0 m</td>
<td>1.0 m</td>
<td>1.0 m</td>
</tr>
<tr>
<td>Altitude Resolution</td>
<td>0.0015 m</td>
<td>0.0015 m</td>
<td>0.0015 m</td>
</tr>
<tr>
<td>Airspeed Resolution</td>
<td>0.000005 m/s</td>
<td>0.0001 m/s</td>
<td>0.0004 m/s</td>
</tr>
<tr>
<td>Calibrated Temperature Range</td>
<td>-20 to 60 °C</td>
<td>-20 to 60 °C</td>
<td>-20 to 60 °C</td>
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<tr>
<td>Burst Airspeed Pressure</td>
<td>34 kPa</td>
<td>103 kPa</td>
<td>310 kPa</td>
</tr>
</tbody>
</table>

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