The Meggitt Avionics’ integrated secondary flight display (iSFD) provides the best solution for standby flight information: attitude, altitude and airspeed, replacing two or three electro-mechanical cockpit standby instruments with a single 3ATI display unit.

The iSFD is a 3ATI cockpit instrument with a high resolution, colour-active matrix liquid crystal display (AMLCD), with new LED backlight and compatible with the latest AMLCD primary flight displays.

Within the iSFD:
- solid state sensors
- microprocessor system measuring
  - aircraft pitch, bank attitudes and air data.

Air data is measured using the internal air data module (ADM) alternatively, if measured air data is available from an aircraft multi-function probe (MFP) or air data computer (ADC), the iSFD can receive and process the available digitally transmitted air data.

If digital magnetic heading data is available, e.g. from a Meggitt Avionics Magnetic Heading Sensor (MHS), the iSFD will also display aircraft magnetic heading.

Key features
- All solid state design
- High resolution full colour AMLCD display
- High brightness LED backlight
- Large useable screen area, fully anti-aliased
- Formats and brightness matched to primary displays
- 3ATI instrument panel clamp or flange bolt mount
- Internal Inertial Measurement Unit (IMU)
- Internal Air Data Module (ADM)
- Extensive built in test (BIT)
- Passive cooling—no internal fans

Key benefits
- 60 second initialization for mission readiness
- Numerous display options, including magnetic heading
- Excellent reliability
- Robust attitude performance using proven algorithms
- Accurate and stable air data performance with Static source error correction (SSEC) supports RVSM compliance
- Optional pitot-static pressure input
- Highly efficient LED backlight
- No ITAR components
- Future-proofing for long service life
- Service-proven robust attitude algorithms
- Short length, low weight and low power
Operation

Application of power to the iSFD initiates the attitude alignment process.

Barometric pressure is adjusted using the bezel-mounted rotary knob which, if pressed, selects standard (STD) barometric pressure.
- The HP/IN button selects either hectopascals (HP) or inches of mercury (IN) to display barometric pressure.
- The NAV button selects ILS display (glideslope, localizer or backcourse).

Extra capability

Different button applications are programmable, including a menu option for specific functions, such as control of display luminance, air data parameters and navigation data.

It provides warning of Vmo and Mmo (or Vne) using a red thermometer-style display and by changing the digital airspeed and Mach display colour to red.

A strip of ground (for pitch up) or sky (pitch down) remains visible at extreme pitch angles to provide a continued reference of aircraft attitude. Red warning chevrons appear at designated extreme pitch angles.

Applications

Commercial

- Transport
- Fixed Wing
- Rotary Wing

Military

- Transport
- Fixed/variable wing
- Rotary Wing

Key customers

AgustaWestland Helicopters, HondaJet, Bombardier Learjet, Hawker Beechcraft business jets, Boeing Apache

Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Size:</td>
<td>3ATI x 8 inches (204mm) long</td>
</tr>
<tr>
<td>Weight:</td>
<td>4.2 lbs (1.928 kg)</td>
</tr>
<tr>
<td>Power:</td>
<td>28 VDC</td>
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<tr>
<td></td>
<td>14W normal operating, 22W cold start (150 foot lamberts display luminance)</td>
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<tr>
<td></td>
<td>18 W normal operating, 26 W cold start (300 foot lamberts display luminance)</td>
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<tr>
<td>Aircraft system interface:</td>
<td>ARINC-429, MIL-STD-1553B</td>
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<tr>
<td>Mounting:</td>
<td>Standard 3ATI instrument clamp or flange bolt mounting</td>
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<tr>
<td>Display:</td>
<td>Active area 2.4 x 2.4 inches (61 x 61mm)</td>
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<tr>
<td></td>
<td>Resolution 300 x 300 pixels</td>
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<tr>
<td>Environmental:</td>
<td>Operating temperature -40° C ~ +70° C</td>
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<tr>
<td></td>
<td>Storage temperature -55° C ~ +95° C</td>
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<tr>
<td>Standards:</td>
<td>Environmental RTCA/DO-160F</td>
</tr>
<tr>
<td></td>
<td>Hardware Hardware DO-254 Level B</td>
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<tr>
<td></td>
<td>Software Software RTCA/DO-178B Level B</td>
</tr>
<tr>
<td></td>
<td>TSOs TSOs C106, C3d, C4c, C6d, C113</td>
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Specification subject to change. Images are for further info not a true representation.

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