



## Integrated Standby Instrument

- GE Aerospace has a long history of introducing the very latest display technology into the Aerospace environment, developing high integrity products and systems that are essential in safety-critical aircraft applications for new or retrofit civil and military platforms. Our modular designs enable maximum reuse with the latest design techniques to ensure delivery of world-class, affordable through-life products.
- Our 4th and latest generation Integrated Standby Instrument is now available, with reduced weight and power consumption. The unit is a standard 3x3 inch (3ATI) format, with a flexible range of custom options.
- The GE Aerospace standby product family is designed, qualified to deliver high performance and accuracy whilst operating within extreme environments. High precision integrated sensors detect attitude rates and accelerations to determine accurate attitude performance in both static and dynamic conditions across the operational range. Similarly, integrated pitot and static sensors generate airspeed and altitude accuracies that exceed the performance required by the ETSOs specification across the full operating range.
- High resolution AMLCD NVIS compatible display combined with patented software rendering techniques provide a clear readable image across the whole viewing angle and dimming range. The Integrated Standby Instrument is a robust, compact, lightweight, and low power solution that provides an extremely reliable solution requiring no routine maintenance. Developed and certified to DAL B enables simple integration and certification into new and existing applications.
- The standby instrument is customisable via an embedded personalisation software module which enables a single part number to satisfy multiple aircraft platforms across the fleet.



### Key Benefits:

- ✓ High reliability and performance
- ✓ ITAR free
- ✓ EASA certified (9 ETSOs)
- ✓ Repair facilities in the UK and US
- ✓ 5-in-1 display
- ✓ Customisable
- ✓ Obsolescence managed

### Proven Applications:

- Fast jet
- Rotorcraft
- Civil Air Transport
- Military Air Transport
- Business Jet
- Military Trainer

### TAKEAWAYS



Lightweight

**3.0 lbs**



Low Power  
(exc. Display heater)

**11.2 w**



High reliability  
specifications  
(MTBF)

**>25K hrs**  
(Commercial)



NVG compatible

**NVIS-B**  
class 1

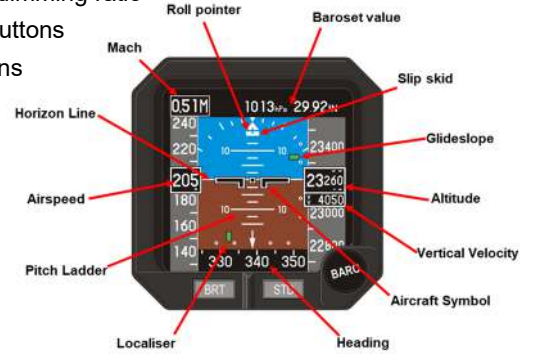
# Features

## Installation

- Weight: 3.0 lb (1.36Kg)
- Dimensions: 3" x 3" x 9" (3ATI)
- Unit power: 11.2W @ 28VDC, additional heater power, 25W @32.2VDC. (if required)
- Cooling: Passively cooled
- Bezel: Clamp or Flange mounted configurations

## Display

- Configurable: Customisable internal personalisation table to define unit functionality
- Display: High resolution anti-aliased AMLCD display 2.4" x 2.4" (61mm x 61mm)
- Backlight range: < 0.05 to > 150fL, 3000:1 dimming ratio
- HMI controls, illuminated rotary knob and buttons
- Wide or narrow display viewing angle options
- NVIS compatibility: NVIS B, class 1
- 5-in-1 display



## Sensors

- Attitude range,  $\pm 180^\circ$  Roll,  $\pm 90^\circ$  Pitch:
  - $\pm 450^\circ/\text{sec}$  in Pitch, Roll, and Yaw rate
  - $\pm 18g$  X, Y and Z acceleration
- Airspeed range, 0 to 490 kts (subsonic) 910 kts (supersonic), Altitude -2000 to +59000 ft:
  - Total pressure, 0.5 bar differential (subsonic), 2.0 bar differential (supersonic)
  - Static pressure, 1.0 bar absolute

## Electrical Interfaces

- ARINC 429, 4 receive channels, 2 transmit channels
- Full Duplex RS-422
- Multiple Discrete inputs (configurable)
- Multiple Discrete outputs (optional)
- Bezel Lighting bus input (optional)
- MIL-STD-1553B (optional)
- IEEE 1394 (Firewire) (optional)

## Qualification

- DO160G
- MIL-STD-810G
- MIL-STD-704
- DEF-STAN 00-35

## Certification

- ETSOs: C2d, C4c, C8e, C10b, C46a, C95a, C106A1, C113 and C3d (incomplete system)
- Safety: DO254 and DO178B DAL B
- Reliability: > 25,000 Flight Hours MTBF (commercial)

## Expandable functionality



Radio Control



Engine Instrument Display



Reversionary Navigation



Traffic Advisory System