

# iDMU integrated Data Management Unit

## Integrated Acquisition, Processing and Recording for Business and Commuter Aircraft

The iDMU (integrated Data Management Unit) for Regional and Business Aviation Aircraft is a powerful data management system that provides ACMS (Aircraft Condition Monitoring System) and recording capabilities in one light and compact unit. Designed to meet the extensive data monitoring requirements of new generation digital aircraft, the iDMU interfaces with the integrated avionics suite to collect data from multiple sources.

### Multi-Function Unit

Featuring an enhanced ACMS function, the iDMU enables faster data processing and increased throughput, therefore facilitating both aircraft/engine health monitoring and daily flight operations monitoring. The iDMU also integrates a data recording function via PC Card media for QAR/DAR and message data recording, as well as optional Ethernet capability for high-speed data connectivity with Ethernet-based systems, such as Electronic Flight Bags (EFBs), wireless communication systems and data loaders.

### Flexible ACMS Capability

Like all other Teledyne airborne avionics systems, the iDMU is fully user-programmable via Teledyne's MS Windows-based Application Generation Software (AGS). This sophisticated tool allows operators to easily customize the various elements of their ACMS applications, such as QAR/DAR output data maps, MCDU screens and enhanced ACMS reports.

Teledyne's iDMU is certified on the Embraer 175 and 190 aircraft and is available for both retrofit and forward fit installations, on these and other regional aircraft.

### Key Benefits and Features:

- ACMS and recording capabilities in one standalone unit
- Enhanced processor allows for faster data processing
- Optional 1024 words per second expanded data map
- Fully user-programmable ACMS interface via Teledyne's AGS software tool (for more information, please consult our AGS data sheet)



## ACMS Reporting:

The iDMU is delivered with a set of standard ACMS reports including

- Engine Start
- Engine Aborted Start
- Engine Performance
- Landing
- In-flight Engine Fail
- Take-off
- Stable Cruise
- Flight Summary
- Weather/Position
- Limit Exceedance
- Turbulence

Additional reporting capabilities can be programmed by Teledyne or the aircraft operator. A few examples of advanced reports are provided below

- Turbulence Inspection
- Engine Oil Monitoring
- Ground Run-up
- Maximum MACH Exceedances
- Overweight Inspection
- Maintenance Reports
- EGT Divergence
- Go-around Landing
- Flap Placard Speed Exceedance
- Gear Down Speed Exceedance
- Flight Control
- Aborted Take-off
- Flap/Slat at Altitude Exceedance
- Engine Trend
- Aircraft Stable Frame
- Max Operating Altitude Exceedance
- Touch and Go Landing

## Technical Characteristics:

- Power Consumption: < 32 watts
- Connector: ARINC 600 Standard
- Enclosure: 3 MCU
- Weight: < 10 lbs

