

FLIGHT DATA ACQUISITION AND MANAGEMENT UNITS FOR P3 AHMS

As a leading provider of end-to-end aircraft data management solutions, Teledyne Controls has been providing civil and military operators with sophisticated data acquisition equipment for over 40 years. Teledyne's latest generation Data Acquisition Units have been adapted for P3 operators across the globe.

The P3 Aircraft Health Monitoring System (AHMS) is supported by uniquely configured versions of Teledyne's standard DFDAU and MFDAU. These units are specifically adapted to meet the data monitoring requirements of the P3 aircraft, providing comprehensive hardware and software solutions to collect and analyze flight data.



DFDAU
2233000-846 6CMU

The AHMS software is highly flexible, giving users the ability to specify the parameters they need for data monitoring, maintenance, and operational efficiency, without the artificial constraints typically imposed by other systems. The P3 AHMS allows operators to proactively monitor the health of the aircraft, which facilitates preventive maintenance and enhances operations.



MFDAU
2234500 4MCU

P3 DFDAU/MFDAU & AHMS FUNCTIONAL CAPABILITIES

- Fully configurable AHMS software system via Teledyne's MS Windows based Application Generation Software (AGS)
- Combines mandatory AHMS and recording capabilities into one single unit. Dual processor design ensures isolation and allows full AHMS user re-configuration without re-certification
- Updated to be compliant with US Navy P3 aircraft requirements
- Used by the US Navy (NAVAIR) and the Brazilian Air Force, both as a structure data acquisition system and a flight test system
- Easily configurable dual processor that supplies data to the mandatory Digital Flight Data Recorder (DFDR)
- Front panel display for easier access and readability of the operation (DFDAU only)
- Increased I/O capability to support the expanded interface requirements of multiple aircraft types
- Interchangeable across multiple aircraft types (up to 20 independent uploadable DFDR data frames)
- Up to 512 WPS DFDR recording, this feature meets and exceeds the new regulatory agency requirements
- Reduced card count results in higher reliability, reduced weight and lower power
- Expandable for future requirements
- Interfaces with Teledyne's Wireless GroundLink® system* for automated data download
- Simplified ground data processing using Teledyne's flight data analysis software, AirFASE®*
- Supports Installation on all configurations of P3 aircraft

MCDU Interface

- Reconfigurable display menus including real-time reconfigurable reports
- ARINC 429 Label call up display
- Mnemonic call up display
- Stored reports directory including last flight
- QAR and PCMCIA Start/Stop Control
- Password protection
- Report distribution
- Constant modification
- ADL/PDL Upload/Download Menu

External QAR, WQAR Interface and PCMCIA Recording

- 64, 128, 256, 512, 1024 and 2048 output rates selectable

Printer Interface

- 40, 53, 64, and 80 column print formats
- ARINC 597/740/744/744A
- Reconfigurable report formats

Other Peripherals

- Interfaces for 615 ADL and PDL
- Automatic or manual message generation for down linking

* Please consult our Wireless GroundLink® and AirFASE® brochures for additional information

Integrated Recording Module (PCMCIA/PC Card)

- Supports recording of raw data and message (report) data
- Eliminates the need for separate recorder wiring on aircraft
- Supports PCMCIA ATA Type II
- Supports uploading AHMS applications from this module

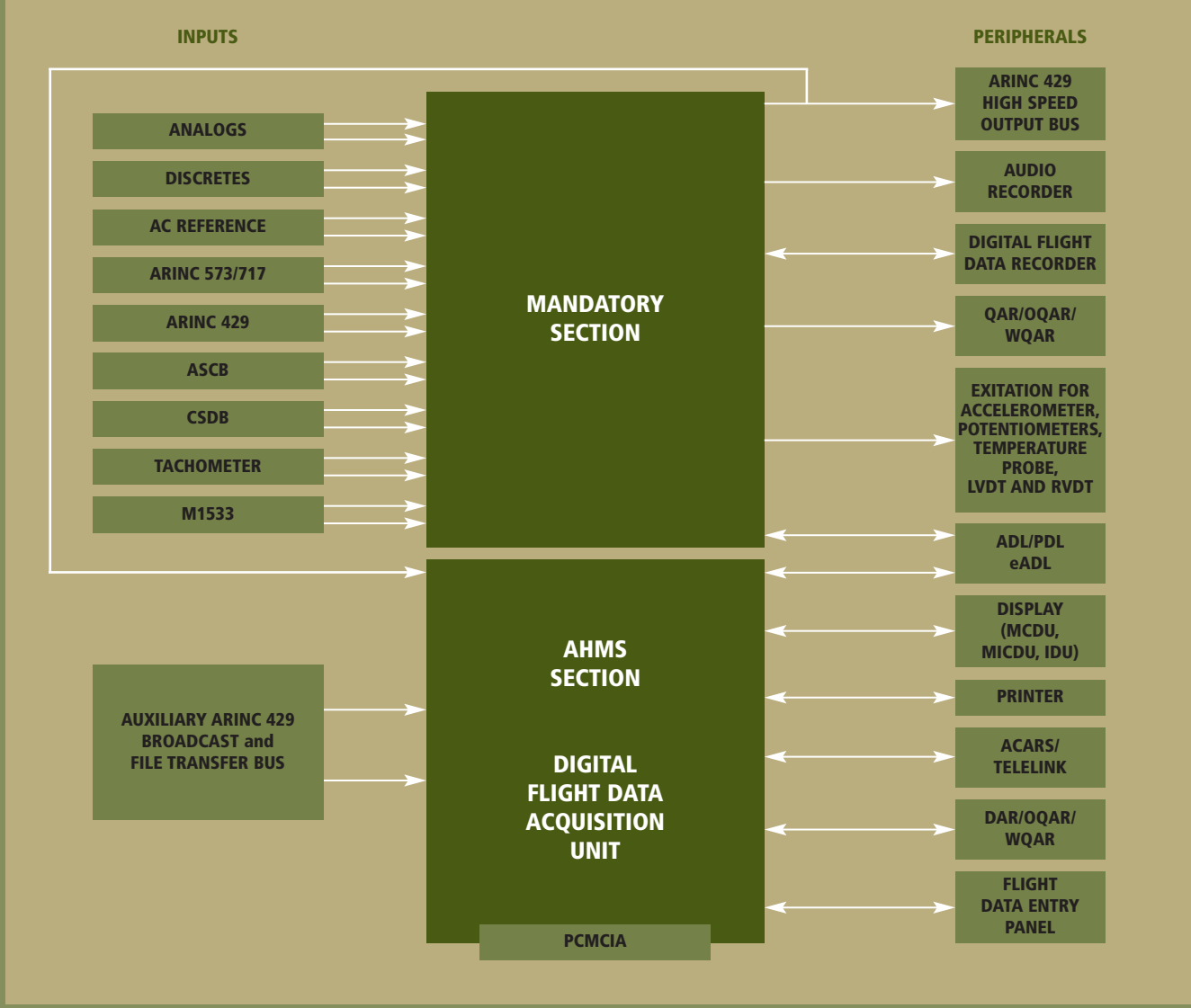
Front Panel 16 Character Alphanumeric Display (DFDAU only)

- Multiple software part numbers displayed
- Faults are displayed in user friendly text instead of codes
- Battery backup allows viewing of software versions and fault messages even when the unit's power is off

Input Capabilities

- Up to 64 A429 input ports available to both the mandatory and AHMS processors independently
- Up to 57 programmable analog input ports (53 3 wire, 4 4 wire)
- Up to 4 Mil 1553 ports
- Up to 180 discretes
- 1 spare slot for future functions

INTERFACE DIAGRAM



Solutions for a Connected Aircraft

The DFDAU is an integral part of Teledyne's end-to-end aircraft data management solutions. Designed to assist operators with their FDM/MFOQA (Flight Data Monitoring/Military Flight Operations Quality Assurance) initiatives, these offerings include innovative airborne data acquisition products, air-to-ground wireless data transfer systems and ground-based applications and services that fit together to deliver greater benefits to the operators and provide the total solution necessary for a successful flight safety program.