



FLIGHT RECORDER PRODUCT INFORMATION (200-XXX-XX)

The flight recorder (200 series) product line meets all EUROCAE ED-112A requirements for all aircraft classes in CVFDR or standalone FDR or CVR requirements, including 25 hour cockpit audio and datalink/CPDLC.

Standard digital recording interfaces include:

- ARINC717 (auto rate detection up to 2,048 wps)
- ARINC429 (4 channels, automatic rate)
- ARINC825 (single channel)
- RS422/485 (single channel)
- 10/100 Ethernet (3 ports) (e.g. for video recording)

No specialist GSE tools are required for download with an internal web server and standard modular ethernet jack able to connect to a standard portable computer. A restricted-access custom aircraft interface cable can be used to support download of CVR audio data without need for removal from the aircraft and subsequent recertification. A standard Internal TPM 2.0 security chip also enhances cyber security when connected to other ethernet based aircraft systems.



The unit incorporates dual redundant 28VDC power inputs as well as internal Recorder Independent Power Supply (RIPS) as standard to support 10 minute backup.

Expansion capabilities via internal daughter cards include:

- 8 Channel Analog (including internal Flight Data Acquisition Unit for conversion to ARINC-717)
- MIL-STD-1553B or Dual Channel CAN Aerospace
- Asymmetric (RSA-2048) and Symmetric (AES-256) encryption of recorded data
- Cellular download option (global frequency bands and embedded SIM)
- Internal Global Aeronautical Distress and Safety System (GADSS) triggering for external ELT and timeline recovery of flight data (TRD)
- Third party analysis software on dedicated 400MHz 32 bit ARM M7 processor with ECC

Specifications

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Dimensions	120mm (4.7") width, 202mm (8.0") depth, 84mm (3.3") height
Weight	Less than 2.25kg (< 5 lb) in CVFDR configuration with standard RIPS
Mounting Type	Flanged with Qty 4 #10 QPL fastener (e.g. NAS1352-3-10)
Mounting Orientation	Unrestricted
Construction	Aluminium AMS QQ-A-200/8, ASTM-B221
Finish	MIL-DTL-5541 Type II Class 3 on exposed and faying metal surfaces MIL-PRF-85285 Top Coat (Aviation Orange)
Power supply input	Dual 28 VDC nominal, 10 to 80 VDC, DO-160 CAT Z
Power supply consumption	Maximum 20 watt (RIPS charging), 5 watt Nominal
Power supply hold-up energy	10 minutes minimum (Internal Recorder Independent Power Supply)
Input Connector	MIL-DTL-38999 Series III, D38999/20FG35PN
Mating Connector	MIL-DTL-38999 Series III, D38999/26FG35SN
Operating Temperature (operating)	-55 to +71 degrees Celcius
Operating Temperature (non-operating)	-55 to +85 degrees Celcius
Operating Altitude	Up to 55,000 ft
Environmental Qualification	RTCA DO-160G
Design Assurance	RTCA DO-178C Level D
Design Approvals	TSO-C123c, TSO-C124c, TSO-C177a, TSO-C155b
Production Approvals	FAA TSOA, FAA 8130-3 Release