

# REVOLUTION RECORDER SERIES

## REVO 250LW CVFDR



The REVO 250LW CVFDR is designed for the light aircraft, unmanned aircraft and emerging Advanced Air Mobility (eVTOL) industry. Able to exceed EUROCAE ED-155 and meet all stringent ED-112A crash survivability requirements for Flight Data Recorders and Cockpit Voice Recorders when fitted without an underwater locator beacon for ultra-low SWaP (size, weight and power) at a price point of an ED-155 recorder.

With standard 16 gigabyte storage, the recording durations vastly exceed the ED-112A standards of 25 hours for data and audio.

### Interfaces include:

- ARINC717 (auto rate detection up to 2,048 wps)
- ARINC429 (4 channels, automatic rate)
- ARINC825 (dual or single channel)
- RS422/485 (dual or single channel)
- 10/100 Ethernet (2 ports) (e.g., for video recording or telemetry/maintenance interfaces)
- 4 channel ED-112A compliant high-quality audio

No proprietary GSE tools are required for download with an internal web server able to connect to a standard portable computer. A standard Internal TPM 2.0 security chip is able to enhance cyber security when connected to other ethernet based aircraft systems. Optional recording encryption utilizes asymmetric (RSA-2048) or symmetric (AES-256) algorithms.

Compared with a modern and already lightweight Part 23 and Part 25 CVFDR (equipped with ULB), the 250 series recorder further reduces the weight and volume by over 50% while still meeting the challenging ED-112A crash survival requirements.



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<b>PHYSICAL AND ELECTRICAL SPECIFICATIONS</b>	
Dimensions	80mm (3.1") width, 155mm (6.1") depth, 80mm (3.1") height
Weight	Less than 2.3lb (1.05 kg)
Mounting Type	Flanged with Qty 4 #10 QPL fastener (e.g., NAS1352-3-10)
Mounting Orientation	Unrestricted
Construction	Aluminum 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 4 watt
Sensor Pack	Internal MEMS Accelerometer and resettable impact switch
Input Connector	MIL-DTL-38999 Series III, D38999/20FJ35PN
Mating Connector	MIL-DTL-38999 Series III, D38999/26FJ35SN
Temperature	-55 to +71 degrees Celsius
Altitude	Up to 55,000 ft
Environmental Qualification	RTCA DO-160G
Design Assurance	RTCA DO-178C Level D
Crash Survivability	EUROCAE ED-112A
Design Approvals	TSO-C123c, TSO-C124c, TSO-C177a
Production Approvals	FAA PMA (where PMA assist applies), otherwise Certificate of Conformance

<b>Test</b>	<b>ED-112A</b>	<b>ED-155</b>
Impact Shock	3,400 g	1,000 g
Penetration	500 lb, 10ft drop	Nil
Static Crush	5,000 lb	1,000 lb
High Temp Fire	1,100 deg C, 1 hour	1,100 deg C, 15 minutes
Low Temp Fire	260 deg C, 10 hours	Nil
Deep Sea Immersio	20,000ft, 30 days	Nil

