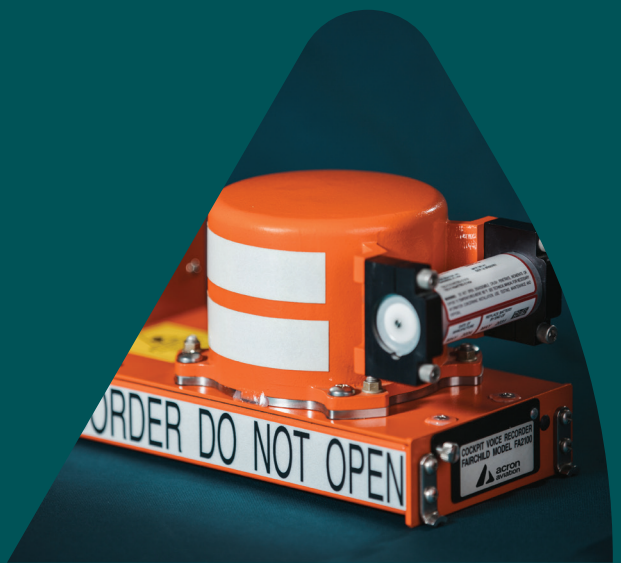
FA2100 Series Cockpit Voice and Flight Data recorders

Reliable collection and storage.



Acron Aviation' FA2100 family of solid-state cockpit voice and data recorders offers proven reliability and performance for fixed- and rotary-wing aircraft operating in virtually all civil and military environments. These versatile systems are compact, lightweight, inexpensive to operate and provide maximum high-quality collection and storage of critical information in flight. The FA2100 is available as either a stand-alone Cockpit Voice Recorder (CVR), a dedicated Flight Data Recorder (FDR) or a combination Cockpit Voice and Data Recorder (CVDR).

FA2100 CVR COCKPIT VOICE RECORDER

The Acron Aviation FA2100 Solid-State Cockpit Voice Recorder (SSCVR) is a direct replacement for all Fairchild Model A100A, A100S and A200S Cockpit Voice Recorders (CVRs). The FA2100 provides the maximum recording capacity at the highest quality. Options include ATC data link messaging and Onboard Maintenance System (OMS) reporting. FA2100 SSCVR offers two hours of high-quality recording on all four channels and is designed for both civil and military aircraft. It requires very low power – only 12 watts (max AC) and 10.5 watts (max DC).

FA2100 FDR FLIGHT DATA RECORDER

The Acron Aviation FA2100 Solid-State Flight Data Recorder (SSFDR) has a proven MTBF record in the field, weighs in at less than 11 lbs. (5 kg) and offers documented low cost of ownership due to its simple design. The reliable FA2100 is available in ½ ATR short- or long-box configurations, consumes little power (7.5W V DC, 8.5W V AC) and uses common ground support equipment for both the CVR and CVDR. Accelerometers and installation accessories are available. The FA2100 SSFDR has proven itself in the Commercial Airline industry, demonstrating a mean time between failure (MTBF) of 50,000 hours. The unit is also approved for military operations under MIL-STD-1553. By demonstrating longevity and low cost of ownership over the life of the system.

FA2100 CVDR COCKPIT VOICE AND DATA RECORDER

Acron Aviation' FA2100 Solid-State Cockpit Voice and Data Recorder (CVDR) delivers two hours of recording capabilities on all four channels, or a minimum of 25 hours of flight data at 256-1024 words-per-second (wps). Its small size and lightweight engineering make it the ideal CVDR solution for an array of civil, commercial and military aircraft, as well as helicopters. The ruggedized Crash-Survivable Memory Unit (CSMU) is made of stainless steel, but is available in lightweight titanium and can also be installed as a stand-alone Cockpit Voice Recorder (CVR) or Flight Data Recorder (FDR).

FEATURES

- Cockpit Voice Recorders store 2 hours of high-quality audio on all four channels
- Flight Data Recorders store 25 hours of data, at rates of 64/128/256/512 or 1024 words per second
- Commercial airline field experience of >50,000 hours
- ARINC 573/717/747 compliant FDRs. Optional MIL-STD-1553 versions
- ARINC 557/757/757A complaint CCVRs. DataLink/CPDLC, and ARINC 429 OMS capability
- Lightweight – 10.6 lb. maximum, with stainless steel Crash-Survivable Memory Unit (CSMU) (4.8 kg)
- Optional titanium CSMU
- Low-power consumption – 13.8 W max AC and 12.3 W max DC
- Stand-alone Cockpit Voice Recorder (CVR) and Flight Data Recorder (FDR) options available
- Control units, microphones and installation accessories are available

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Specifications

	FA2100 CVR (COCKPIT VOICE RECORDER)	FA2100 FDR (FLIGHT DATA RECORDER)	FA2100 CVDR (COCKPIT VOICE AND DATA RECORDER)
Physical			
Size:	1/2 ATR short	1/2 ATR short or long	1/2 ATR short
Height:	5.5 in. (13.97 cm)	Short: 5.5 in. (13.97 cm) / Long: 5.5 in. (13.97 cm)	5.5 in. (13.97 cm)
Width:	5.0 in. (12.70 cm)	Short: 5.0 in. (12.70 cm) / Long: 5.0 in. (12.70 cm)	5.0 in. (12.70 cm)
Depth:	12.6 in. (32.00 cm)	Short: 12.6 in. (32.00 cm) / Long: 19.6 in. (49.78 cm)	12.6 in. (32.00 cm)
Weight:	10.6 lb. (4.8 kg) maximum; 8.3 lb. optional	Short: 10.6 lb. (4.8 kg) maximum Long: 11.2 lb. (5.1 kg) maximum	10.6 lb. (4.8 kg) maximum; 8.3 lb. optional
Power			
Requirements:	115 V, 400 Hz or 28 VDC	115 V, 400 Hz or 28 VDC	115 V, 400 Hz or 28 VDC
Consumption:	13.8 W max AC; 12.3 W max DC	11.2 W max AC; 10.1 W max DC	13.8 W max AC; 12.3 W max DC
Control Unit:	18 VDC, 25 mA short-circuit protected power source for control unit/micro-phone preamplifier	-	18 VDC, 25 mA short-circuit protected power source for preamplifier
Recording			
Audio:	30 min. or 120 min. high-quality 4-channel voice and datalink recording	-	30 min. or 120 min. high-quality 4-channel voice and datalink recording
Data:	-	25 hrs. of flight data at 64/128/256/512 or 1024 wps	25 hrs. of 573/717 flight data at 256/512 wps, rotor speed and time code
Monitor Out			
Headphone Jack:	600 Ω at the control unit; optional 8 Ω	-	600 Ω at the control unit; optional 8 Ω
Bulk Erase:	Fail-safe, double electric interlock audio memory erasure completed in 5 sec.	-	Fail-safe, double electric interlock audio memory erasure completed in 5 sec.
Connectors			
Rear:	AS81659- and ARINC 404-compliant 57-pin single receptacle	AS81659- and ARINC 404-compliant 57-pin dual receptacle	AS81659- and ARINC 404-compliant 57-pin single receptacle
Mating:	AS81659- and ARINC 404-compliant single-insert plug	AS81659- and ARINC 404-compliant dual-insert plug	AS81659- and ARINC 404-compliant single-insert plug
Envionmental			
Temperature:	Operating: -55° C to +70° C / Non-operating: -55° C to +85° C		
Altitude:	Operating: -1,000 ft. to 55,000 ft		
Vibration:	Operating: DO-160C Para 8.6.2 Category C (random)	Operating: DO-160C Para 8.5.2 Category C (random)	Operating: DO-160C Para 8.6.2 Category C (random)
Penetration:	ED-55: 500 lb./10 ft./1/4-in. probe		
Static Crush:	ED-56A: 5,000 lb.	-	ED-55: 5,000 lb.
Fire Protection:	50,000 BTU/sq. ft./hr. for 60 min. at 1100° C; 10 hrs. at 260° C		
Impact:	ED-56A: 3,400 G, 6.5 ms, half-sine shock wave	-	ED-55: 3,400 G, 6.5 ms, half-sine shock wave
Additional Features			
Underwater Acoustic Beacon:	90-day beacon, seven-year battery and bracket supplied with unit		
Product Certification:	FAA TSO-C123a, TSO C-123b, TSO-C177	FAA TSO-C124a, TSO-C124b	FAA TSO-C123a and C124a, TSO-C123 and TSO-C124b
Electrical Interface:	ARINC 757	747, MIL Spec. 1553	ARINC 75
Electrical /Mechanical Design:	-	-	ARINC 747, MIL-STD-1553
Regulatory Specification:	ARINC 404A, EUROCAE MOPS ED-56A, RTCA/DO-160C, RTCA/DO-178B Level D	ARINC 404A, EUROCAE MOPS ED-55, RTCA/DO-160C, RTCA/DO-178B Level D, RTCA/DO-254 Level D	ARINC 404A, EUROCAE MOPS ED-55 and ED-112, ED-56A
Certifications:	ISO 9001:2008 and AS9100:2009 Rev. C Certified		

FA2100

Acron Aviation is an agile commercial aviation partner with a long heritage of providing established, industry-certified solutions, as well as future-focused, data-driven innovations. With customers across the globe our employees are committed to the company mission of innovating to create safer skies. For more information visit acronaviation.com