



## Extra lightweight data recorder (xLDR)



### High-capacity voice and flight data recorder designed for eVTOLs, helicopters and unmanned aircraft.

The Acron Aviation Extra Light Data Recorder (xLDR) is designed especially for eVTOL, light aircraft and unmanned systems. It exceeds mandates and global recommendations for crash-protected flight recorders on smaller aircraft.

Acron Aviation engineering agility and recorder expertise leveraged the LDR design to provide a lighter-weight solution with enhanced features specific for aircraft used in the urban mobility market. The xLDR weighs less than 2.43 lbs. (1.1 kg) and provides crash-protected recording of audio and flight data, video and GPS parameters. Enhanced features include increased data rate collection, auto-recording and pilot-control capabilities.

Any subset of the total xLDR memory capability not intended for regulatory-mandated applications can be used for capturing videos and GPS recordings and analysis. These features can be highly beneficial for OEMs and pilot training.

A built-in web server makes it easy for data retrieval and configuration with just a laptop and web browser. The data can be analyzed after each flight to identify component failures, safety risks and evidence-based training.

#### KEY FEATURES

- > ED-155 compliant
- > FAA TSO-C197 & EASA ETSO-2C197 certified
- > Meets EASA SIB 2019-15R1 for in-flight recording for light aircraft
- > Crash-Survivable Memory Unit (CSMU)
- > Built-in web server – retrieve recorded data with just a laptop and web browser
- > Up to four channels of audio, including Cockpit Area Microphone (CAM)
- > Status monitoring and fault logging
- > Industry-standard file types (audio, data, video)

#### OPTIONS

- > ARINC 429 recording
- > Cockpit Area Microphone available
- > Internal/external GPS receiver
- > ED-155 Video support using NTSC/PAL camera

#### DISCOVER MORE:

[acronaviation.com/avionics](http://acronaviation.com/avionics)

xLDR	
<b>Physical</b>	
Height:	4.9 in. (12.45 cm)
Width:	3.9 in. (9.9 cm)
Depth:	8.0 in. (20.3 cm)
Weight:	< 2.43 lbs. (1.1 kg)
Reliability:	10,000 hrs.
<b>Power</b>	
Requirements:	28 VDC
Consumption:	< 5 W (without external microphone and camera)
<b>Connectors</b>	
D-Sub 50-Pin:	Analog audio, control inputs, status outputs, ARINC 717 serial data, ARINC 429 serial data on certain xLDR models, external GPS serial data
RJ-45:	100 Base-T Ethernet
<b>Environmental</b>	
Temperature:	Operating: -55° C to +70° C / Non-operating: -55° C to +85° C
Altitude:	Operating: 0 to 55,000 ft.
Vibration:	DO-160G Cat. S, curve M
Static Crush:	1,000 lbs.
Fire Protection:	1100° C for 15 min. and 260° C for 5 hrs.
Impact:	1,000 G over 6-axis
<b>Options</b>	
Data Options:	ARINC 717 25-hours with up to 2048 wps ARINC 429 25-hours
Audio:	2-hours x 4 channels
Cockpit Area Microphone (CAM):	Available option
GSE:	Webserver or Recorder Data Interface option
<b>Compliance</b>	
ED-155	
DO-160G	
FAA TSO-C197 and EASA ETSO-2C19	
<b>Company Certifications</b>	
ISO 9001:2008 and AS9100:2009 Rev. C Certified	