

AE2001 sFPDP Disk Recorder

Turn-key recording/playback solutions
Can handle multiple sFPDP streams
Aggregated recording rates of up to 1600MB/sec
Removable, enterprise class SSD storage
Intuitive Graphical User Interface
Data extraction direct to workstation/network
Community-standard headers supported
Longer record durations optional



Avalon AE2001-sFPDP Disk Recorder (front view).

TECHNICAL OVERVIEW

The Avalon Electronics Serial FPDP Recorder provides users looking to record and playback multiple Serial FPDP streams with a complete turn-key recording system, which is fully compatible with the VITA 17.1 specification.

Up to 4 Serial FPDP, user configurable channels can be recorded or played simultaneously, with an aggregated recording rate of up to 1600MB/sec. Data is recorded on built-in, removable, enterprise-class SSD storage with available options on RAID size. A standard QSPF socket is provided for connection to the 4 serial lanes.

The recorder is controlled via an intuitive GUI allowing the user to configure each channel independently.

Parameters are entered for each channel specifying Flow Control, CRC, Copy/Loop modes of operation. All parameters contain limit checking for an easy to use, straight out of the box user experience.

The Recorder may be controlled locally or remotely using either an Avalon-developed Windows-based application, or by using the Avalon *Command and Control* message set. External control is via the recorder's 1Gb Ethernet control port. The Avalon Application can be compiled to operate under a range of Windows and Linux operating systems.

The Avalon Application can control all recorder functions, including: *Record, Play, Interface Configuration Settings* and *Data Management*.

Recorded data are stored in a Standard File Format allowing transcription and analysis to be readily

Serial FPDP supported data rate:	2.5, 5.0, 10.0 GBaud (Customer-specific rate can be accommodated)
sFPDP supported modes of operation:	LoopCopy, CRC, Flow Control.
Data Storage:	4TB SSD as standard - other options available.
sFPDP Interface:	QSFP
Data extraction:	USB 3.0; Gigabit Ethernet
GUI:	Built-in
Graphics Output:	VGA and HDMI ports provided
General Options:	Triggered recording; GPS time & position stamping; IRIG-B time-stamping
Dimensions:	217mm (19" Half-width) x 4u x 560 mm deep.
Weight:	~ 25 Kg.
Power:	Standard input: 85 to 240VAC, 50 or 60 Hz; Optionally: 24 or 48VDC.
Environmental:	EMC/RFI: Designed to conform to the applicable sections of MIL-STD-461. Shock/Vibration: Designed to conform to the applicable sections of MIL-STD-810, and US Navy specifications. Similar construction approved for flight in USAF Rivet Joint and other military and civilian turbo-jet and propeller aircraft.
System Control:	Stand-alone, fully-featured Avalon-designed GUI (graphical user interface) running on an external laptop/PC (via Ethernet port).
File Format:	Midas Blue (Platinum 2.0) or MATLAB™ <small>see note 1</small>

Note 1: MATLAB is a trademark of The MathWorks Inc.