



# Telemetry Data Recorder

- ◆ 4 PCM inputs - IRIG 106 compatible
- ◆ 4 PCM outputs - IRIG 106 compatible
- ◆ 4 video input channels
- ◆ 1 video output channel
- ◆ 4 audio input channels
- ◆ 1 audio output channel
- ◆ 2 RS-422 control channels
- ◆ IRIG-B Time Code Generator input
- ◆ Up to 4 MIL-STD-1553 channels
- ◆ Recording on CFast cards
- ◆ 1 GB Ethernet interface
- ◆ Mil-Std-704A compatible-28 VDC powered.



The Telemetry Data Recorder (TDR) is a dual purpose unit utilized as either a test data recorder, or as an operational unit used to record mission data. As a Mission Data Recorder it also functions as a Data Transfer Unit. The TDR is supplied as either a panel mount or "hot plate" mount unit for airborne or ground based applications. The unit records telemetry data as a PCM input, Mil-Std-1553, RS-422, video and audio. Data is stored on CFast cards. The unit is controlled over either the Giga Bit Ethernet channel or Mil-Std-1553 channels.



The use of CFast technology provides for a fast and reliable recording media and a low power, light weight solution for applications requiring reliable data storage.

Debriefing recorded data is accomplished by either physically removing the CFast Flash card from the recorder and inserting it into a reader on a PC based Debriefing Station, or by downloading the recorded data over the Giga Bit Ethernet channel.

Debriefing software is provided using the Integrated Debriefing Environment (IDE). The IDE software package provides synchronized PCM data, video and other data on the same PC screen. Alternatively, recorded video and data can be viewed on separate screens.

## Specification

- Interfaces: 4 PCM IRIG-106 compatible inputs or 8 UART inputs  
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IRIG-B (optional G) Time Code Generator input  
Ethernet 10/100/1000 BaseT,  
Up to 4 Mil-Std-1553 RT or BM channels IRIG-106 Chapter 8  
Up to 4 video inputs - PAL/NTSC  
One video output  
Up to 4 mono audio inputs  
One audio output  
RS-422/485 control and Telemetry channels  
Up to 4 Input Discrete signals – 28V/OPEN/GND  
One output discrete signal for Status
- Storage: 1 CFast cassette
- Power: 28 VDC, Mil-Std-704A, max 15 watt
- Weight: Less than 1000 gram.
- Dimensions: W=146 mm, H=47 mm, D=159 mm
- Environmental: Temperature: Operating: -40°C to +71°C  
Storage: -40°C to +85°C  
Vibration: Functional: 7.6 grms 5-2000 Hz  
Endurance: 9.8 grms 5-2000 Hz  
Shock: Functional: 17 g, 40msec  
Humidity: 95% RH  
Altitude: 50,000 ft  
Salt Fog: Mil-Std-810F, Method 509.4  
Acceleration: 8g peak
- RFI: Compliant with Mil-Std 461

