Telspan Data

Highlights

- 64Gbps (8GBps) Sustained Record Rate
- 64TB of Data Storage Capacity
- 12 Channels 1-10G Optical (Multiple Protocols)
- 8 Channels MIL-STD-1553 (MT/RT)
- 8 Channels Video (S-Video/Composite)
- 8 Channels PCM (RS-422)
- 4 10/100/1000BASE-T Ethernet Interfaces
- 2 Analog Audio Channels
- 1 RGB Video Output Channel
- 2 IRIG 106 Chapter 7/HDLC PCM Outputs
- GPS, IRIG-A/B/G, IEEE-1588 PTP, MIL-STD-1553 Timing
- MIL-STD-1553, Ethernet, Discrete, & RS232/422 Command, Control & Monitoring
- FIPS 140-2 Encryption

Overview

The CPAS-5530 Modular Instrumentation TAP Recorder (MITR) is a high-bandwidth, high-capacity IRIG 106 Chapter 10 data recorder/publisher with a modular TAP Interface Module (TIM) & Removable Memory Module (RMM). MITR is suitable for a wide range of data recording requirements in harsh & demanding environments.

The configurable TIM provides protocol independent full duplex 1-10G optical transceivers, MIL-STD-1553, video, audio & PCM channels. Logic driven protocols for optical channels include Ethernet, Fibre Channel, sFPDP, ARINC-818, & other communication transports. Rx input channels are recorded, published & also can be routed to any Tx output channel. MITR supports user configurable Framing & Signaling, Upper-Level Protocol, & Message/Sub-Message filtering of data. Also MIL-STD-1553 message/word level filtering. The filtered data can be published & or transmitted out the IRIG 106 Chapter 7/HDLC PCM outputs.

MITR supports the playback of recorded video or PCM in real-time to the video or PCM output channel which is controlled by the MIL-STD-1553, RS232/422 or Ethernet command and control interfaces.

The MRMM consists of up to 4 NVMe solid state drives in a single carrier supporting recording bandwidths up to 64Gbps (8GBps) & capacities up to 64TB. MRMM drives can also be used as Network Attached Storage (NAS) via multiple front panel Ethernet interfaces. User configurable channel groups can be directed to individual drives, multiple drives, & or Ethernet interfaces (publishing) outputs of TIM physical channels or filtered virtual channels. A modular bay allows use of the Government provided DRMM as an option.

FIPS 140-2 encryption/decryption is supported. Keys can be received via MIL-STD-1553, Ethernet, or RS232/422 command & control interfaces or via the RMM on insertion/power up (key is then erased from RMM).

MITR also contains a GPS receiver, IRIG Time Code Generator, & hardware based IEEE-1588v2 time engine. The external Ethernet interfaces can be used for IRIG 106 Chapter 10 data publishing, command/control, data download, NAS or as a Switch. Any/all external Ethernet interfaces can also be recorded.

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Highlight Specifications

28VDC
MIL-STD-704A
MIL-STD-1275E

Width 6.25"
Length 8.83"
Height 7.68"

MIL-STD-810F
MIL-STD-461E

~ 14.0 Pounds

-40C to +70C
MIL-STD-810F

64Gbps
(8GBps)
Sustained
Recording Rate

Up to 64TB
NVMe SSD
FIPS Encryption

(12) Optical
(8) Video, (8) PCM
(8) 1553

GPS Receiver

IRIG A/B/G
1PPS, DC & AM
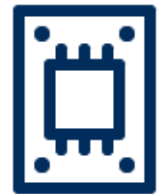IEEE-1588v2

(4) 10/100/1000
External Ethernet
Ports

CH7 & HDLC
Encoder/Decoder
2 PCM Output

MIL-STD-1553
Ethernet
RS-232/422

Discrete I/O IAW
IRIG 106 CH10
Reset / Event In
Data Errors Out

FPGA Based
Protocol
Transforms