ACQUIRE & PROCESS RECORD TELEMETER & STREAM REPLAY

MDR

Highly Versatile Airborne Data Acquisition, Recording & Dissemination System

FLIGHT TEST INSTRUMENTATION

Hetm

The MDR system allows collecting data in **complex and harsh airborne flight test environments.** Thanks to its modularity, the system will adapt from the lightest to the most extensive daily test requirements in terms of variety of signals to be recorded, environmental constraints and recording time.

A **wide range of signal interface modules** tailored to the most common data sources and busses ensure that today's and tomorrow's requirements will be addressed.

The **modular MDR design** provides the flexibility for choosing cost-effective systems or high-end FTI systems with high-capacity storage media. There are **mainframes** available **with 2, 4 or 8 slots** for signal interface modules.

This configuration flexibility is completed by **advanced data processing** (filtering, decimation, etc.) and managing capabilities, including **UDP and most sophisticated Chapter 7 version 2017 streaming techniques.**

FTI — Flight Test Applications

In-Service Recording & Telemetry

Certification Tests

SCALABLE MAINFRAMES
2 to 8 slots for
signal interface cards

EASY SETUP & RE-CONFIGURATION
In-the-field configuration,
adaptable to any scenario

HYBRID MODULES
Up to 4 different data types
within one module

FULL SPECTRUM OF INTERFACES
PCM, Ethernet, ARINC 429,
MIL 1553, CAN, analog, video,
serial, discrete...

MULTI-RECORDING
Simultaneous recording of
multiple data subsets in separate
files on various storage media
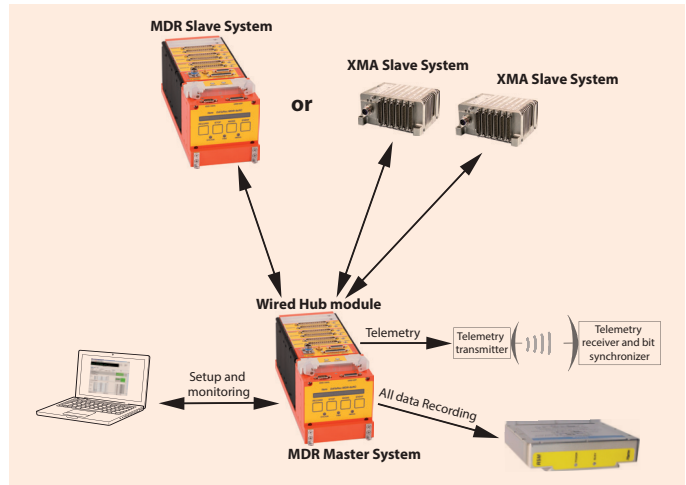
**PIONEER IN IRIG 106 CHAPTER 7
TELEMETRY**

SAFRAN

FLIGHT TEST INSTRUMENTATION

MDR

› TECHNICAL SPECIFICATIONS

Bit rate..800 Mbit/s

Ethernet .... UDP broadcast, PTP (Precision Time Protocol; time code sync. IEEE 1588-2002/ IEEE 1588-2008), FTP server download function, remote control

Time coding ....IRIG A, B, G, 1 pps / 10 pps, GPS time code, PTP (Precision Time Protocol; IEEE 1588-2002 (slave) / IEEE 1588-2008 (slave))

High precision oscillator 10ppb accuracy

Built-in GPS receiver

Real time clock (RTC)

Temperature (operational) MIL-STD-810F

Vibration...MIL-STD-810F

Shock/Acceleration MIL-STD-810F

Storage capabilities ....CF-cards, SSD
....Capacity up to 3.2 TB

Data format .... IRIG 106 Chapter 10

› AVAILABLE IN 4 MAINFRAME VARIANTS

MDR-2...2 module slots/CF card

MDR-4 CF ....4 module slots/CF-card

MDR-4 RC...4 module slots/storage modules

MDR-8..8 module slots/storage modules

› SPECIAL FEATURES

► Multi-file recording
► Multi-destination recording
► Access and streaming of pre-recorded data while recording
► Available bandwidth for streaming
► Support of native formats (MPEG, PCAP, ...)
► Live setup modification via Ethernet connection and comfortable configuration software

Set-up, Monitoring, Time Synchronization, Data Transfer via one single wired Ethernet link.

SENSORS

PCM
ARINC 429
STANAG 3910
MIL-STD-1553
CAN
ETHERNET
VIDEO
VOLTAGE
(E.G. TEMPERATURE, PRESSURE, MICROPHONE)

TELEMETRY
DIGITAL
PCM
ETHERNET
DISCRETE
VIDEO
HYBRID
ANALOG
CAN BUS
MIL BUS

ACQUISITION

PROCESSING RECORDING

SSD / LAN

IRIG 106 CH10 UDP BROADCAST

CONTROL AND MONITORING

SAFRAN