



ACQUIRE & PROCESS RECORD TELEMETRY & STREAM REPLAY

MDR-GT / MDR-GTS

Hybrid Concept for Data Recording & Processing
The Ultra-Fast Onboard FTI Solution



Heim



FLIGHT TEST INSTRUMENTATION

The **highly flexible** platform concept of the MDR-GT/MDR-GTS family is technically based on a common mainframe with many high-end built-in interfaces and functions. Specific functions and requirements can be addressed by adding dedicated interface canisters (featuring signal interfaces and/or storage media). With a selection range from **several mainframe variants** and **canister types** together with a **high number of signal modules**, the MDR-GT/MDR-GTS offers **configuration options** for almost all applications and requirements. **Backward compatibility to most MDR modules** is an additional benefit.

Ultra-high data rates and storage capacities plus **advanced data processing** allow for **extensive data** recording and management. The MDR-GT/MDR-GTS leverages these advanced capabilities to meet the most demanding requirements in future applications.

Next Gen. →

Next Gen Flight Test Instrumentation



Big FTI Data



Certification Tests

ULTRA-HIGH DATA RATE AND STORAGE CAPACITY

Up to 16 Gbit/s and up to 64 TB

EXTENDED CONFIGURATION FLEXIBILITY

User-Configurable Canister Concept

INTEGRATED TELEMETRY OUTPUTS

IRIG 106 Chapter 7 Support

DATA AT REST CAPABILITIES

Encryption key management (MDR-GTS)

RSOD – REMOVABLE SECURE OPERATIONAL DISK

For extraction of non-volatile memory from system (MDR-GTS)

FULL SPECTRUM OF INTERFACES

10GigE, Video, Fibre Channel, ARINC 429, PCM, MIL-STD-1553, H.265 Video, Analog...

MDR-GT / MDR-GTS

> COMMON MAINFRAME

Performance

Recording data rate up to 16 Gbit/s
Possible storage capacity (via 2 canisters) up to 64TB

10 Gigabit/s Ethernet

2 ports, 10GBASE-T/1000BASE-T/100BASE-TX, Ethernet data recording, Remote control, UDP broadcast, PTP (Precision Time Protocol; time code sync. IEEE 1588-2002 / IEEE 1588-2008), FTP server download function

Other Setup/Control/Remote Interfaces

Setup, User specific data 1 SD-Card slot (optional)
Serial Remote 1 channel RS232 or RS422 serial remote
Contact Remote (CR) 8 discrete input/output

Flexibility for Classified Environments

Definable booting sectors. Only volatile memory

Device Access Protection

Secure Authentication + TPM Verification

Voice

Channels 2 input single ended headset channels,
..... 2 single ended head set monitor outputs

Time Coding

Input Standard codes ... IRIG A, B, G, DC-AM / 1 pps / 10 pps, GPS time code (NMEA), PTP

Output Standard codes IRIG A, B, G, DC-AM, 1 pps / 10 pps;
GPS NMEA on RS232/RS422, PTP

Optional: Built-in GPS Receiver

Max. Time System Accuracy ± 3 ppb

Telemetry Output

Physical 2 independent output channels
Output content .. IRIG 106 Chapter 7 constant bit rate PCM data stream
Output signal PCM Data and Clock

Autonomous Monitoring System

Intelligent Self Diagnostic

RSOD: Removable Secure Operational Disk (MDR-GTS)

Removable storage device for MDR-GTS firmware and setup files.
Identification via secure authentication process

Data at Rest Capabilities (MDR-GTS)

FIPS 140-2-certified storage media

> CANISTER ARCHITECTURE

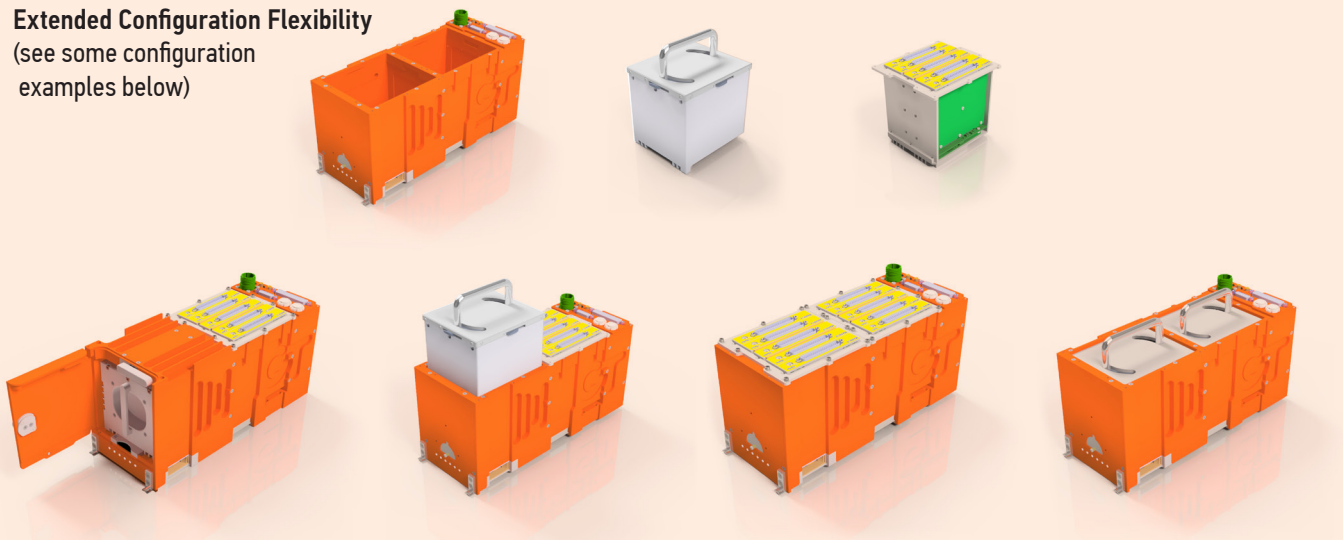
Storage canister Top/Front access, up to 32TB per canister (TSB/FSB), up to 2 storage canisters per MDR-GT

..... Top/Front access, up to 32TB per canister, with integrated Download interface (TSA/FSA), up to 2 storage canisters per MDR-GT

Data acquisition canister Top access MDR-Module canister (TM) with 5 MDR module slots

Extended Configuration Flexibility

(see some configuration examples below)



GLOBAL SALES

5, Avenue des Andes - CS 90101 - 91978 Courtaboeuf Cedex - FRANCE - Tel.: +33 1 69 82 78 00 - Email: sales.sdsy@safrangroup.com

USA

3005 Business Park Dr - Norcross, GA 30071 - USA - Tel.: +1 770 753 4017 - Email: sales@SafranDataSystemsUS.com