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# HEIM DATaRec® MDR series

## ZODIAC DATA SYSTEMS / HEIM

**AEROSAFETY & TECHNOLOGY**
Telemetry & Telecommunications

ZODIAC AEROSPACE

# BEYOND ENGINEERING –
# A NEW RECORDER FAMILY

## NEW STANDARDS OF FLIGHT TEST INSTRUMENTATION

The HEIM DATaRec® MDR family of ZODIAC Data Systems sets new standards for flight test instrumentation: smaller, lighter and price-optimized.

The HEIM DATaRec® MDR product family offers the user a flexible system: the simple swap and exchange of signal interface modules by the user himself allows customized fittings and set-ups of the tasks at hand.

# HEIM DATaRec® MDR SERIES
# THE NEXT GENERATION FTI

The HEIM DATaRec® MDR-2s is a digital data acquisition system that can be equipped with user changeable signal conditioning modules to meet various applications.
The cockpit mountable housing contains a CF card slot for the recording media.

- cutting edge technology
- integrated signal conditioning
- rugged and reliable
- compact size
- feature rich mainframes
- designed to applications
- scalable performance
- end user can easily swap signal modules

IEEE1394b
USB/HDP
Hartm DATaRec MDR-8sRC
RECORD
STOP
MODE
EVENT
SYSTEM
TIME
MEDIA
Hartm DATaRec MDR
RECORD
STOP
MODE
EVENT
SYSTEM
TIME
MEDIA

# HEIM DATaRec® MDR SIGNAL MODULES

The HEIM DATaRec® MDR signal modules can be integrated in a MDR mainframe and combined with any other HEIM DATaRec® MDR modules to a multi channel recording system. This provides full flexibility and ensures the right FTI system for your demands.

| Modules | Description |
|---|---|
| MANA8 | 8 analogue input channels, up to 100 kHz sampling rate per channel |
| MARR16 | 16 ARINC 429 input channels |
| METH2 | 2 Ethernet input channels 10BaseT, 100BaseT, 1 Gbit/s |
| MMRG8 | 8 PCM input channels, up to 30 Mbit/s data rate per channel |
| MUAR6T | 6 dual redundant MIL STD 1553B input channels, transformer coupled |
| MUAR6D | 6 dual redundant MIL STD 1553B input channels, direct coupled |
| MUSM16 | 16 asynchronous serial input channels |
| MVCR1 | 2 high definition analogue video input channels |

# WHAT IS YOUR REQUIREMENT TODAY?

## MCSR COCKPIT REMOTE CONTROL

- eSATA connection to MDR (PoE Ethernet: work in progress)
- Protected Start/Stop switch
- Sealed memory cartridge slot for SSD ( ≤ 500 GB) and CF cards ( ≤ 64 GB)

## MDR SIGNAL INTERFACE MODULES

- ARINC 429 (16 channels)
- MIL-STD-1553 (6 channels dual redundant)
- PCM (8 ch., throughput 30 Mb/sec, max. 100 Mb/s)
- Video I (2 ch. analogue PAL/NTSC, HD H.264/AVC)
- Video II (2 channels HD SDI, H.264/AVC)
- Analog I ICP (8 channels, 100 kHz sampling)
- Ethernet 2 channels 10/100/1000 Mb/sec
- Asynchronous serial (16 channels)
- Hybrid Avionics (PCM, MIL, ARINC)

## MDR-2S MAINFRAMES

- Built in Ethernet 10/100/1000 Mb/s
- Built in 2 channels voice
- Built in serial RS232 / RS422
- Time code IRIG A, B, G, IEEE1588 and GPS NMEA
- Sealed CompactFlash slot
- External media via eSATA and Ethernet
- System bus speed 800 Mbit/s
- IRIG-106 chapter10 data format
- Easy setup via front panel USB, serial or Ethernet
- Contact remote connector w. 6 discrete in & out
- Full UDP broadcasting

# REPLAYING YOUR RECORDS

## THE HEIM MDR

is a record only system

## REPRODUCING WITH GSR/HEIM DATaRec® 3

Usage of existing equipment to reduce flight test costs

## REPLAY OPTION

with any IRIG 106 chapter10 software

## REPRODUCING OPTION

with GSSr/HEIM DATaRec® 4 interfaces

## FULL FLEXIBILITY

with HEIM DATaRec® 4

# HEIM DATaRec® MDR SERIES AT A GLANCE

| | |
|---|---|
| Description | The HEIM DATaRec® MDR series is a flexible record only data acquisition system |
| System bitrate | 100 Mbit/s |
| Bus data rate | 800 Mbit/s |
| Data format | HEIM DATaRec® format. IRIG 106-07 chapter 10 complaint |
| Internal storage device | removable CF card |
| Storage capacity | 16 GB / 32 GB / 64 GB available. GF cards up to 128 GB supported |
| Slots | 2 slots are available for signal conditioning modules.<br>All modules are interchangeable and can be exchanged by the customer |
| Power supply | 11–38 V DC designed to MIL-STD-704E including power interruption of 50 ms |
| Shock resistance | 20 g, 11 ms MIL-STD-810E |

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