

DATA SYSTEMS



ACQUIRE & PROCESS RECORD DISTRIBUTE REPLAY

VS1410

Airborne Mission Data Recorder / Server



ENERTEC



MISSION DATA MANAGEMENT

The VS1410 is a **video & data recorder/server** packaged in a rugged compact chassis, for recording on a **Removable Memory Module (RMM)**. Recorded data can be replayed in a standard PC/Windows® environment, using specific or COTS mission debrief solutions for post mission analysis. In addition, typically for ISR applications data can be replayed while recording on board.

Safran Data Systems offers Embedded Information Management Solutions in a variety of rugged, versatile, scalable equipment and associated services, providing efficient, reliable, and affordable resources for **field/mission data acquisition, processing, storage, exploitation and dissemination, for on board operation manned or unmanned ground, air and sea vehicles.**



Pilot Training & Debriefing



ISR, Search & Rescue



Mission Data Loading & Data Transfer

HIGH DEFINITION VIDEO, PROCESSING & RECORDING
VESA, HD-SDI, DVI

IN-FLIGHT REPLAY WHILE RECORDING
With any e-device

FILE SERVER CAPABILITY
User-defined media partitioning

HIGH CAPACITY RUGGED REMOVABLE CARTRIDGE
64GB to 2TB

QUALIFIED FOR HARSH ENVIRONMENT
DO-160, MIL-STD-704, -461, -810

DESIGNED TO MINIMIZE OBSOLESCE RISK AND MANAGEMENT
FPGA-based design

TECHNICAL SPECIFICATIONS

General characteristics

Dimensions H 95.2 x W 146 x D 187 mm (3.75"x 5.75"x 7.36")

Weight < 2.9kg (6.4lbs)

Installation

Standard NATO rail mounting using DZUS fasteners

ARINC 404-type mounting

Interconnection MIL-DTL-38999 series 3

Power Supply 28 V DC

Consumption typical 25 W

Cooling conduction (no fan)

Interface

Multiple configurations available from following interface capabilities

Video

Up to 5 video sources

PAL or NTSC (analog, composite/S-video/RGsB)

STANAG 3350A (analog, RGsB, 875-line)

VESA (analog, RGB, up to 1280x1024)

High Def.: analog/RGsB/RGBHV, DVI-D up to 1600x1200

SMPT-292M [HD-SDI], 720p/1080i/1080p

ARINC-818

Custom analog video formats on request

Scan conversion

Video replay

User-selected video replay output for simultaneous record/replay

Audio

Up to 4 audio sources

RS-422A (user-configurable, bidirectional)

Remote control, per IRIG 106 chapter 6

GPS/NMEA 0183 input, for extraction of current time, and time stamping of recorded video

Ethernet (2x 1000BaseT)

Remote control per IRIG 106 chapter 6

In-flight replay access to either recorded digital data file including video

Access to built-in web server

Access to remote file server partition

Time update using NTP

Ethernet access to file server using FTP, TFTP, NFS, SMB/CIFS

Discrete I/O

6 inputs and 2 outputs, all configurable

Available options

ARINC-429 high speed

Redundant MIL-STD-1553B

Environmental conditions

Qualified to DO-160, MIL-STD-704, MIL-STD-461, MIL-STD-810

Operating temperature -40°C to +71°C

REMOVABLE MEMORY MODULE

- ▶ Storage Capacity from 64GB to 2TB
- ▶ User-defined media partitioning
- ▶ Interface USB 3.0 + SATA via adapter
- ▶ 10,000 insertions/extractions
- ▶ Encryption capabilities AES 256, FIPS 140-2
- ▶ Fast secure erase
- ▶ Direct access from Windows® PC and Linux



OPERATION

Full motion video acquisition with user-selectable bit rates, featuring MPEG-2, H264

Fully synchronized video, audio and data recording

Built-in web server, providing

Remote control capability

Replay access to either recorded digital data file, with selection of video channel

Access to remote file server partition of SC145 series RMM using FTP, TFTP, NFS, SMB/CIFS

Comprehensive Built-in Test capability

Ground replay and exploitation in standard PC/Windows® environment

FAT-32 recording format (recommended for single-channel recording):

- video replay using third party COTS software with MPEG2 or H264
- codec IRIG 106 Chapter 10 recording format (recommended for multi-channel recording, including video and data bus)
- video/data replay using eZ viewer Software or third-party software

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