

FAERITO[®]

Flight Data, Video and Audio Recorder

Proven, High-Capacity Recorder with Crash-Survivable Memory

- Records up to 32 hours of video and 100 hours of voice/data
- Built-in diagnostics, time synchronization and BIT functions
- Features crash-survivable memory with underwater locator beacon
- Low power, compact and lightweight (SWaP-C)



Mercury's FAERITO[®] is a field-proven, crash-survivable, multi-functional unit that supports audio, video and flight data recording. It receives, digitizes, compresses and stores selected analog audio channels with four analog channels that can be turned on or off via MIL-STD 1553 interface. FAERITO can be configured to download data via a data loader and also has a RIPS option that continues recording 10 minutes of video after power loss. It is certified to EUROCAE ED-112 and RTCA DO-160E standards for both commercial and military aircraft.

FEATURES

- Records audio, video, data, diagnostics, time synchronization
- Downloads recorded audio, video, data
- Bulk erase of recorded memory
- BIT: SBIR, PBIT, IBIT, max 2% false alarm rate, identifies 95% of all failures, isolates 95% of all faults
- Data playback

FIELD-PROVEN SYSTEM

FAERITO is an aircraft-proven solution that has been used across multiple aircraft including:

- Sikorsky S-76++
- CASA-235
- T-45
- Combat Rescue Helicopter

TECHNICAL SPECIFICATIONS

Crash-Survivable Memory and Encryption

- 256 GB crash-survivable memory unit (CSMU)
- Underwater locator beacon: activated upon water submersion to pinpoint CSMU location
- FIPS 140-2, NSA Type-1(available in the USA only) encryption

External Interfaces

- Two (2) MIL-STD 1553 channels
- Four (4) analog audio channels
- One (1) USB or Ethernet ground interface
- Eight (8) discrete signals IN
- Eight (8) discrete signals OUT
- Two (2) RS-170 video channels

Video Interface

- Number of channels: 2 (up to 4 with video multiplexer)
- Analog input: 2 (NTSC/RS-170 standards)
- Video input voltage: 0.7 Vp-p
- Analog video sample clock: 13.5 MHz
- Number of pixels per sample: 16 bits (8 bits luminance and 8 bits chrominance)
- Compressed bit rate: 1 Mbps per channel
- Video compression ratio: 250:1 typical
- Number of frames: 5 per channel

Audio Interface

- Number of channels: 4 mono or 2 stereo
- Input bandwidth: 20 Hz – 20KHz
- Input resistance: 20 KΩ
- Signal-to-noise ratio of input: 74 dB
- Analog audio input level: max 3 Vp-p
- Compressed bit rate: 16 Kbps per channel

Mechanical

- Dimensions: 6" H × 6.5" W × 10" D
- Weight: <11 lb
- Power: 18 W
- RIPS Option

Compliance Certifications

- EUROCAD ED-112
- FAA TSO-C176
- ARINC 573-7/717

Rugged

- Low- temperature survivability: 260° C for 10 hr
- High- temperature survivability: 1100° C for 60 min
- Crush depth: > 6,000 meters
- Natural convection cooled
- MTBF: 230,280 hours
- Operational altitude: 50,000 feet



CSMU with ULB



Crash Survivable Memory Unit (CSMU)

Environmental Certifications

- Tested to D0-160-D
- MIL-STD-704A-F for 28VDC
- MIL-STD-461F (EMI)
- RTCA D0-160E (EMI and Environmental)
- MIL-STD-810G
- TSO-123C and TSO-124C upon request

Corporate Headquarters

50 Minuteman Road
 Andover, MA 01810 USA
 +1 978.967.1401 tel
 +1 866.627.6951 tel
 +1 978.256.3599 fax

**International Headquarters
 Mercury International**

Avenue Eugène-Lance, 38
 PO Box 584
 CH-1212 Grand-Lancy 1
 Geneva, Switzerland
 +41 22 884 51 00 tel

Learn more

mercy.com/contact-us



The Mercury Systems logo and the following are trademarks or registered trademarks of Mercury Systems, Inc.: Mercury Systems, Innovation That Matters, and BuiltSECURE. Other marks used herein may be trademarks or registered trademarks of their respective holders. Mercury believes this information is accurate as of its publication date and is not responsible for any inadvertent errors. The information contained herein is subject to change without notice.

