

IRIG 106 Chapter 10 Recorder

5 Channel PCM Recorder in a 1U network appliance

RS-422 and UDP output

IRIG-B precision timing for recording and playback



SOFTFEP™

IRIG 106 Chapter 10 Recorder

- **IRIG 106 Chapter 10.** Leverage the advantages of standards-based formats and tools to store, process and analyze your data.
- **RS-422 PCM Recording and Playback.** Record and playback 5 channels with time using a single .ch10 file.
- **Live and Playback Chapter 10 UDP Output.** Send live frames to Chapter 10 UDP compliant decommutators. Send playback frames later to re-run contact processing.
- **IRIG-B Timestamping.** Each channel is hardware timestamped with IRIG-B and Recorded for precision timing.
- **IRIG-B Playback Time Regeneration.** Playback of PCM data is aligned to a generated IRIG-B output.
- **Network Centric Operations Concept.** Control and status from a web browser or open standard GEMS (Ground Equipment Monitoring Service) network machine-to-machine interface. Upload and download files using file transfer protocol (FTP) or USB storage.
- **Solid State Storage.** 300 GB high performance solid state drive enables simultaneous recording and playback.
- **Data Quality Monitors.** Each channel provides real-time data quality indicators for Dead Clock, Data Transition Density, Frame Sync Lock Status.
- **Data Visibility.** Use web browser based GUI to see the frame data as it is received or played back.
- **Test Capability.** PCM Loopback capability and integrated 5 channel BERT capability.

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| IRIG 106 Chapter 10 Recorder |
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| Record |
| ----- |
| Frame Output |
| ----- |
| Playback |
| ----- |
| Data Quality Monitors |
| ----- |
| Solid State Storage |



Image courtesy of US Army

The softFEP IRIG 106 Chapter 10 Recorder supports five record and five playback channels

| IRIG 106 Data | Specifications |
|------------------|---|
| UDP Transmission | 10.3.9.1 10.3.9.1.1 10.3.9.1.2 10.3.9.1.3 |
| Setup Record | Computer Generated Data Format 1 Version 2 ASCII IRIG 106 Chapter 9 |
| Time Data | 10.6.3.2 Time Data Format 1 Day, Month and Year Format |
| PCM Data | 10.6.1.1H PCM Data Format 1 10.6.2.2 10.6.2.2A Intra-Packet Header 10.6.2.2B 10.6.2.2D 16 Bit |

| Physical/Environmental | Specifications |
|------------------------|--|
| Dimensions | 1.67" (H) x 17.1" (W) x 15.5" (D) |
| Power | 120 VAC, 50/60 Hz, 250 Watts |
| Temperature | 5-30°C Operating 0-35°C Non-Operating |
| Humidity | < 90% Non-Condensing |

| Functional | Specifications |
|----------------------|-------------------------|
| Serial Telemetry | Data/Clock |
| IRIG Time Resolution | 10 nanoseconds |
| IRIG Accuracy | 100 microseconds |
| User Interface | Browser (Flash Plug-in) |
| Monitor and Control | GEMS |
| System Set-up | Linux |

| Interface | Specifications |
|-------------------------------------|------------------------------------|
| Serial Inputs | Up to 5 |
| Serial Outputs | Up to 5 |
| Electrical Interface (Serial Ports) | RS-422 (optional TTL I/O Panel) |
| Serial I/O Data Rates | Up to 20 Mbps per Channel |
| Clock/Data Polarity | Configurable |
| Ethernet Ports | Two 1-GigE |
| UDP Clients | Multiple |
| UDP Transmitters | Up to 10 |
| IRIG | AM IRIG-B |