



FEATURE SET

Portable Telemetry Recorders

ABOUT WSI

Wideband Systems (WSI) has been providing advanced signal recording products since 1998.

WSI manufactures the industry-leading Digital Recording System (DRS) product family. Optimized for the Telemetry and SIGINT markets, these recorders provide exceptionable bandwidth and scalability while maintaining strict compliance with the IRIG-106 Chapter 10 standard.

The following summarizes some of the capabilities and salient features of our DRS8000 Series & DRS9300X products:

STIG AND SCAP COMPLIANCE

WSI supports the user in maintaining compliance. Applicable Security Technical Implementation Guides (STIG) are implemented out of the box with site customizations supported. Any user-level account can control the recorder.

USER CONTROL

WSI provides several methods of unit control. They are: front panel touch screen, attached monitor-keyboard-mouse, Windows Remote Desktop, and client application over a socket interface.

FIELD INSTALLABLE INTERFACE BOARDS

When a user needs to add additional channels or channel types, this can be done easily by the user with no factory support required.

POWER RESET

Even when power is interrupted during a record, the system retains all data and setup information so that upon power being re-applied, the user just presses RECORD to continue.

INFINITE RECORDING:

The user has the ability to record to either RAID, or to record to both RAIDs in an sequential format.

AES ENCRYPTED DATA SETS

The internal RAID media can be encrypted for security, locked for protection, “secure erased” to protect your program’s Information Assurance, and be password protected.

SECURE OPERATING SYSTEM

All recorders provide a user interface hosted on Embedded Windows-10 Secure Host Baseline (SHB). Support is available to provide quarterly STIG updates in order to stay aligned with evolving security requirements.

REALTIME PERFORMANCE

Realtime record and playback data is processed by high performance FPGAs and embedded LINUX. These data paths do not involve the Windows-10 CPU.

AUTOMATIC TIME SELECTION

The user does not need to know which IRIG signal type is present...Wideband provides automatic detection/decoding of IRIG-A, IRIG-B, or IRIG-G.

EXTERNAL TIMING

To support a range of external timing requirements, the DRS can accept an external 1 PPS signal and an external 10 MHz signal in addition to the standard IRIG-A, IRIG-B, or IRIG-G timing signals and optional GPS.

INTERNAL DISK RAID

All the WSI products are provided with dual-banked, internal disk arrays supporting mirrored, striped, or sequential formats.

FILE NAMING

The DRS software provides the flexibility to either use the default data and time format for CH10 files, or to change the name to a more “user friendly” format.

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Wideband Systems, Inc.

DATA RECORDING

The DRS recorder family will record or reproduce either to the internal RAID or to external media.

CHAPTER-10 SUPPORT

Supports playback reconstruction for IRIG-106 Chapter 10 compliant files while users can select which Chapter 10 version they wish to record.

RECORDING CATALOG

Because Chapter-10 recorders can have many files on them, WSI provides the users a full catalog system to allow the user to quickly review, load, export, or play any Chapter-10 file on the system.

TRIGGERED OPERATIONS

Because many missions are pre-set to start at specific times, the DRS software provides the ability to set a specific IRIG time for a record...or a time for a session playback for mission simulation.

FULL IRIG TIME CODE SUPPORT

WSI offers the recording and reproduction of serial IRIG time, inclusive of YEAR, BCD, and SBS timefields.

FASTER/SLOWER PLAYBACK

When file playback is required to be done quickly, WSI offers the ability to playback 2X, 4X, 8X or 16X the original rate. Playback by 1/2X, 1/4X, 1/8, or 1/16X speeds are also included.

BIT RATE AGNOSTIC

No matter the PCM bit rate programmed, the DRS family is guaranteed to be able to capture your PCM signal, all the way to 40 Mbps ... and play it back with no regard to the "operator-entered" PCM rate.

PCM SIMULATOR

Each PCM card has it's own data simulator for more complete testing.

CHANNEL MAPPING

WSI provides full flexibility to map the channel reproduction to ONE or MANY outputs.

SESSION CONFIGURATION

Even when power OFF is planned or un-planned, any changes are saved and restored upon power-up.

LOOP PLAYBACK

The DRS software provides the user selectable fields so that start time and stop times of a file can be played back continuously.

SELF TEST

BIT (Built-in Test) is performed automatically during every "power on" cycle or upon user request. BIT tests all data multiplexing, formatting, and memory locations so that dependable operation is always assured.

BATCH OPERATION

DRS software allows the user to set up "batch" operations for EXPORTING data files for "after hours" operations.

USER LOGS

All critical mission commands and results are logged with time stamps for system accountability.

MONITOR MODE

DRS provides the user real-time data monitoring of all input channels, as well as data multiplexing and media utilization.