

New!

Model RTV 2602

Serial FPDP Rackmount Value Recorder



Features

- Complete Serial FPDP record and playback system
- Lowest-cost entry into Serial FPDP
- Quick delivery: Model RTV 2602 ships from stock
- 4U 19-inch industrial rack-mount PC server chassis
- Windows® 7 Professional workstation with high-performance Intel® Core™ i3 processor
- Real-time aggregate recording rates up to 400 MB/sec
- 4 TB of data storage to NTFS RAID disk array
- SystemFlow® recording software
- C-callable API for integration of recorder into application
- File headers include time stamping and recording parameters
- Optional GPS time and position stamping

General Information

The Talon® RTV 2602 Serial FPDP Value Recorder is designed to provide a low-cost solution to users looking to capture and play back multiple Serial FPDP streams. It can record up to four Serial FPDP channels to the built-in 4 TB RAID consisting of cost-effective, enterprise-class HDD storage. It is a complete turnkey recording system, ideal for capturing any type of streaming sources. These include live transfers from sensors or data from other computers and is fully compatible with the VITA 17.1 specification.

Like all Talon recorders in the RTV Value Recorder series, the RTV 2602 ships from stock allowing users to be up and running in the field just days after purchase.

The RTV 2602 comes in a 4U 19 in. rack-mount package that is 22.75 in. deep. Signal I/O is provided in the rear of the unit, while the hot-swappable data drives are available in the front. Air is pulled through the system from front to back to allow operation at ambient temperatures from 5° to 35°C.

The RTV 2602 can be populated with up to four SFP connectors supporting Serial FPDP over copper, single-mode, or multi-mode fiber, to accommodate all popular Serial FPDP interfaces. It is capable of both receiving and transmitting data over these links and supports real-time data storage to disk.

Programmable modes include flow control in both receive and transmit directions, CRC support, and copy/loop modes. The system is capable of handling 1.0625, 2.125, 2.5, 3.125 and 4.25 GBaud link rates. Up to four channels can be recorded simultaneously with an aggregate recording rate of up to 400 MB/sec.

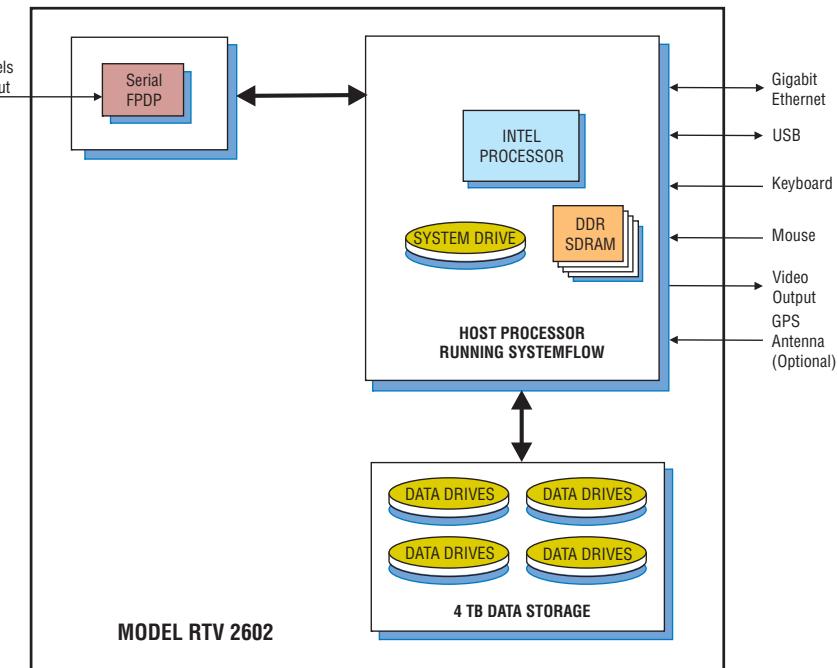
As an option, a GPS or IRIG receiver card can be supplied with the system providing accurate time stamping of recorded data. Additionally, the GPS receiver delivers GPS position information that can be recorded along with the input signals.

SystemFlow Software and API

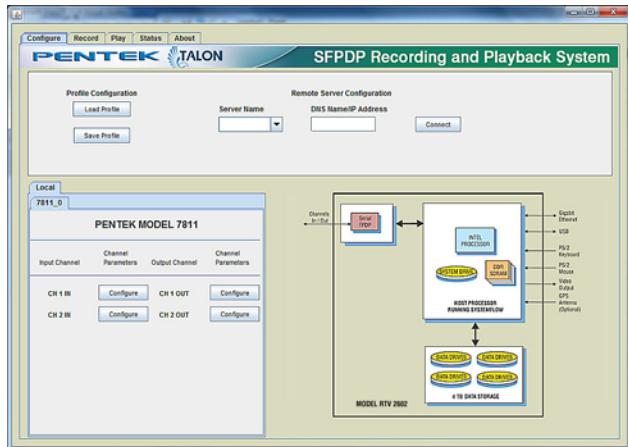
The RTV 2602 includes the Pentek SystemFlow recording software. SystemFlow features a Windows-based GUI (Graphical User Interface) that provides a simple means to configure and control the recorder.

Custom configurations can be stored as profiles and later loaded when needed, so users can select preconfigured settings with a single click.

In addition to the GUI, the RTV 2602 provides a C-callable API that allows the user to integrate the recorder control into any application. A simple set of commands that provide configuration and control come with source code and examples to allow for an exceptionally fast integration. ►



► SystemFlow Graphical User Interface



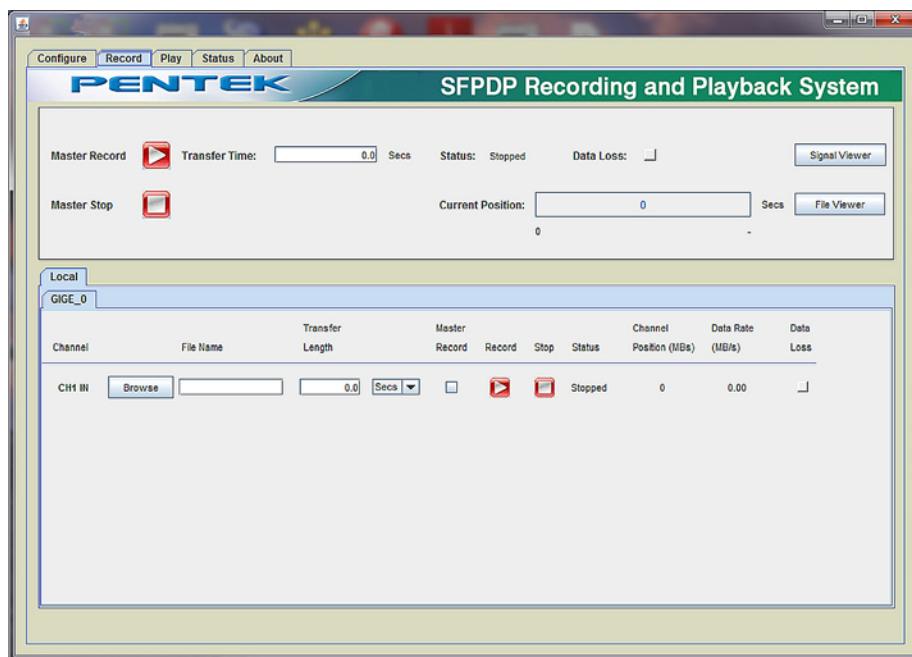
SystemFlow Main Interface

The RTV 2602 GUI shows a block diagram of the system and provides the user with a control interface for the recording system. It includes Configure, Record, Playback, and Status screens, each with intuitive controls and indicators. The user can easily move between screens to configure parameters, control and monitor a recording, and play back a recorded stream.



SystemFlow Hardware Configuration Interface

The Configure screen presents operational system parameters including temperature and voltages. Parameters are entered for each input or output channel specifying the flow control settings and the recognition of a CRC in the data stream. Each channel can also be set up to utilize Serial FPDP's copy/loop mode. All parameters contain limit-checking and integrated help to provide an easier-to-use out-of-the-box experience.



SystemFlow Record Interface

The Record screen allows you to browse a folder and enter a file name for the recording. The length of the recording for each channel can be specified in megabytes or in seconds. Intuitive buttons for Record, Pause and Stop simplify operation. Status indicators for each channel display the mode, the number of recorded bytes, and the average data rate. A Data Loss indicator alerts the user to any problem such as a disk full condition.

By checking the Master Record boxes, any combination of channels in the lower screen can be grouped for synchronous recording via the upper Master Record screen. The recording time can be specified and monitoring functions inform the operator of recording progress. ►

► System Architecture

Built on a Windows 7 Professional workstation, the RTV 2602 allows the user to install post-processing and analysis tools to operate on the recorded data. The recorder stores data in the native NTFS file system, providing immediate access to any installed Windows application. Alternately, the NTFS drive can be accessed remotely over the built-in gigabit Ethernet link from a remote Windows or Linux machine.

Recorded data can be off-loaded via the rear-panel gigabit Ethernet port, two front-panel USB 3.0 ports, two rear-panel USB 3.0 ports or four rear-panel USB 2.0 ports. A built-in DVD +/- R/RW drive allows the user to burn recorded data to disk. Hot-swappable front-panel drives can be easily removed and replaced with empty drives to provide additional data storage.

Specifications

PC Workstation (standard configuration)

Operating System: Windows 7 Professional

Processor: Intel Core i3 processor

Clock Speed: 2.0 GHz or higher

SDRAM: 8 GB

RAID

Storage: 4 TB

Number of Drives: Six, removable, front panel access

Optical Drive: DVD+/-R/RW, front panel access

USB Ports: Front panel: Two USB 3.0; rear panel:

Two USB 3.0; Four USB 2.0

Ethernet: Single 1GbE, rear panel

Supported RAID Levels: 0

Serial FPDP Interface

Copper - Option 280

Cable: 100-ohm shielded twin-ax

Connector Type: SFP+

Max. Cable Length: 20 m

Multi-mode Fiber Optical - Option 281

Cable: Multi-mode fiber, 850 nm

Connector Type: LC

Max. Cable Length: Up to 300 m

Single-mode Fiber Optical - Option 282

Cable: Single-mode fiber

Connector Type: LC

Max. Cable Length: Up to 10 km

Physical and Environmental

Size: 19" W x 22.75" D x 7" H

Weight: 50 lbs

Operating Temp: +5° to +35° C

Storage Temp: -40° to +85° C

Relative Humidity: 5 to 95%, non-condensing

Power Requirements: 100 to 240 VAC, 50 to 60 Hz, 500 W max.

Model RTV 2602 Options Information

General Options

Option -261 GPS time & position stamping

Option -264 IRIG-B time stamping

Serial FPDP Interface

Option -280 SFP+ connectors

Option -281 Multi-mode optical, LC connectors

Option -282 Single-mode optical, LC connectors

Specifications are subject to change without notice