

New!

Model RTS 2715

10-Gigabit Ethernet Rackmount Recorder



Features

- Records 10-gigabit Ethernet streams
- TCP and UDP protocols
- Copper or optical 10GbE interfaces
- Aggregate recording rates to 1.6 GB/sec
- 4U or 5U 19-inch industrial rackmount PC server chassis
- Windows® 7 Professional workstation with a high performance Intel® Core™ i7 processor
- Up to 100 terabytes storage to NTFS RAID disk array
- RAID levels of 0, 1, 5, 6, 10 and 50
- SystemFlow® GUI virtual instrumentation panel for fast, intuitive operation
- C-callable API for integration of recorder into applications
- File headers include time stamping and recording parameters
- Optional GPS time and position stamping

Contact factory for options, number of channels, recording rates, and disk capacity.

General Information

The Talon® RTS 2715 is a complete turn-key recording system for storing one or two ten-gigabit Ethernet (10GbE) streams. It is ideal for capturing any type of streaming sources including live transfers from sensors or data from other computers and supports both TCP and UDP protocols.

Using highly-optimized disk storage technology, the system achieves aggregate recording rates up to 1.6 GB/sec.

Two rear panel SFP+ LC connectors for 850 nm multi-mode or single-mode fibre cables, or CX4 connectors for copper twinax cables accommodate all popular 10GbE interfaces.

Optional GPS time and position stamping accurately identifies each record in the file header.

SystemFlow Software

The RTS 2715 includes the SystemFlow Recording Software. SystemFlow features a Windows-based GUI (Graphical User Interface) that provides a simple and intuitive means to configure and control the system.

Custom configurations can be stored as profiles and later loaded as needed, allowing the user to select preconfigured settings with a single click.

Built on a server-class Windows 7 Professional workstation, the RTS 2715 allows the user to install post-processing and analysis tools to operate on the recorded data.

The RTS 2715 records data to the native NTFS file system, providing immediate access to the recorded data.

Data can be off-loaded via two gigabit Ethernet ports or six USB 2.0 ports. Additionally, data can be copied to optical disk, using the 8X double layer DVD±R/RW drive.

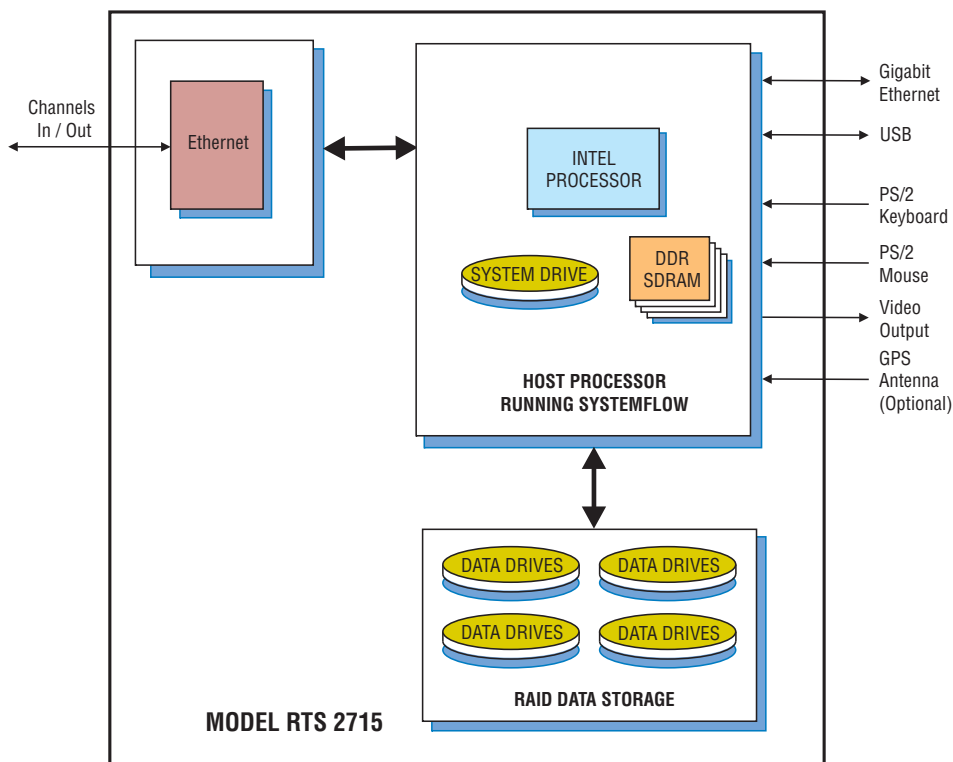
Flexible Architecture

The RTS 2715 is configured in a 4U or 5U 19" rack-mountable chassis, with hot-swap data drives, front panel USB ports and I/O connectors on the rear panel.

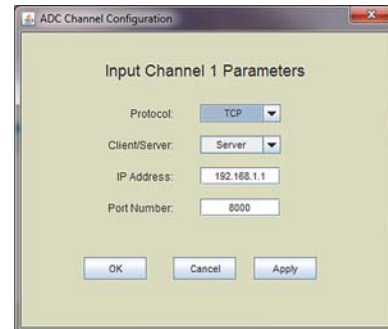
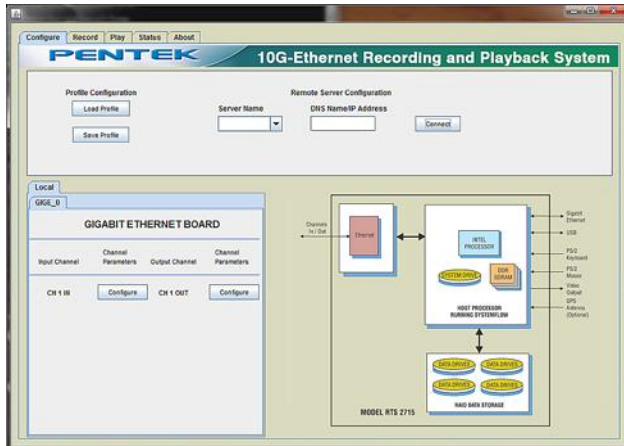
Systems are scalable to accommodate multiple chassis to increase channel counts and aggregate data rates.

All recorder chassis are connected via Ethernet and can be controlled from a single GUI either locally or from a remote PC.

Multiple RAID levels, including 0, 1, 5, 6, 10 and 50, provide a choice for the required level of redundancy. The hot-swappable HDDs provide storage capacities of up to 100 TB in a single 6U chassis. ➤



► SystemFlow Graphical User Interface

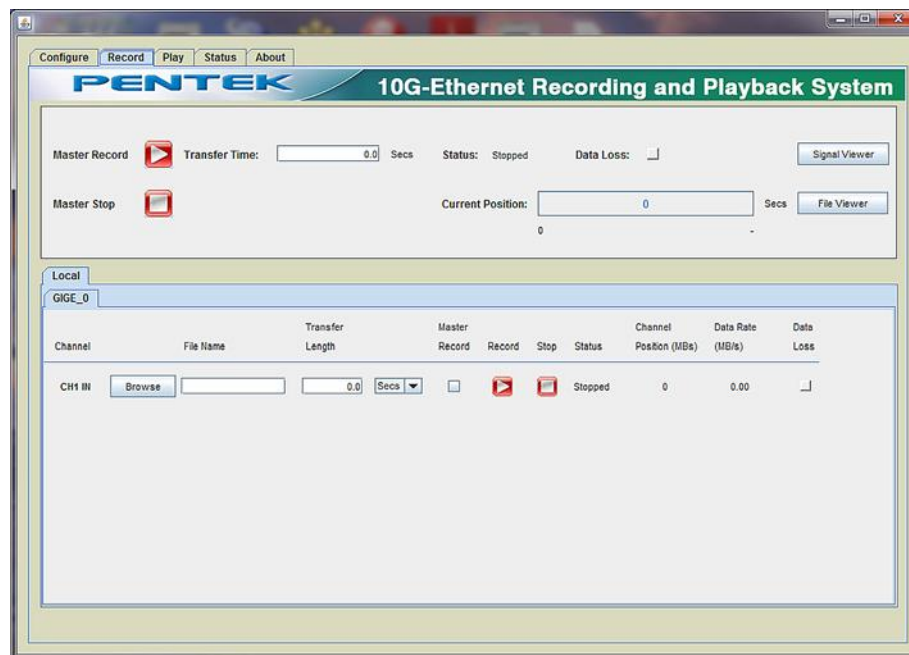


SystemFlow Main Interface

The RTS 2715 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 UDP or TCP protocol, client or server connection, the IP address and port number. 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. ►

► SystemFlow API

SystemFlow includes a complete API (Application Programming Interface) supporting control and status queries of all operations of the RTS 2715 from a custom application.

High-level C-language function calls and the supporting device drivers allow users to incorporate the RTS 2715 as a high-performance server front end to a larger system. This is supported using a socket interface through the Ethernet port, either to a local host or through an internet link for remote, stand-alone acquisition. Recorded NTFS files can be easily retrieved through the same connection.

Specifications

PC Workstation

Operating System: Windows 7 Professional

Processor: Intel Core i7 processor

Clock Speed: 2.0 GHz or higher

SDRAM: 6 GB

RAID

Storage: 2–100 TB

Drive Type: Hard disk drives

Supported Levels: 0, 1, 5, 6, 10 and 50

10-Gigabit Ethernet Interface

Copper - Option 280

Quantity: 2 ports

Cable: Twinax copper

Connector Type: CX4

Max. Cable Length: 15 m

Multi-mode Fibre Optical - Option 281

Quantity: 2 ports

Cable: Multi-mode fibre, 850 nm

Connector Type: LC

Max. Cable Length: Up to 300 m

Single-mode Fibre Optical - Option 282

Quantity: 2 ports

Cable: Single-mode fibre

Connector Type: LC

Max. Cable Length: Up to 10 km

Physical and Environmental

Dimensions

4U Long Chassis: 19" W x 26" D x 7" H

5U Long Chassis: 19" W x 26" D x 8.75" H

Weight: 50–80 lb

Operating Temp: +5° to +45° 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 RTS 2715 Ordering Information and Options

Interface Options

Option -101	Gigabit Ethernet
Option -102	10-Gigabit Ethernet

Channel Configuration

Option -201	1-Ethernet port
Option -202	2-Ethernet ports
Option -204	4-Ethernet ports
Option -208	8-Ethernet ports

Note: Option -208 available only with Option -101

10GbE Interface

Option -280	SFP+ connectors
Option -281	Multi-mode optical, LC connectors
Option -282	Single-mode optical, LC connectors

Storage Options

Option -406	2.0 TB HDD storage capacity	400 MB/sec
Option -411	4.0 TB HDD storage capacity	400 MB/sec
Option -416	8.0 TB HDD storage capacity	800 MB/sec
Option -421	16.0 TB HDD storage capacity	1.6 GB/sec
Option -423	20.0 TB HDD storage capacity	1.6 GB/sec
Option -439	30.0 TB HDD storage capacity	1.6 GB/sec
Option -450	45.0 TB HDD storage capacity	1.6 GB/sec
Option -460	60.0 TB HDD storage capacity	1.6 GB/sec
Option -480	100.0 TB HDD storage capacity	1.6 GB/sec

Note: Options -450 and -460 require a 5U Chassis; Option -480 requires a 6U chassis

General Options (append to all options)

Option -261	GPS time & position stamping
Option -264	IRIG-B time stamping

Contact Pentek for compatible Option combinations

Storage and Channel-count Options may change, contact Pentek for the latest information

Specifications subject to change without notice