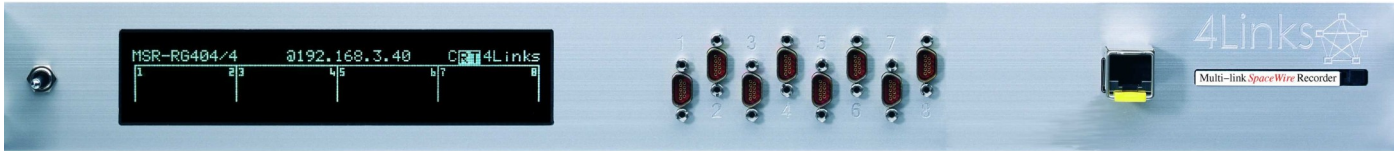


Multi-Link SpaceWire Recorder

MSR-RG408-MS



Overview

4Links Multi-link SpaceWire Recorder (MSR) allows SpaceWire traffic to be captured, buffered and transmitted over Ethernet via a TCP/IP socket connection. TCP/IP is a standard interface mechanism supported by all major operating systems, so no additional software drivers are required. The MSR provides for detailed analysis of SpaceWire networks, including routing switches. The MSR enables a passive recording of SpaceWire transfers, on one, two, or four links. It monitors packets in both directions on all the SpaceWire links, adding time tags at the start and end of each packet, and sending the data to a computer for recording and analysis. Software is provided to help manage and search the recordings.

Features

Ethernet and TCP/IP provide a standard interface mechanism that is supported by all major operating systems, so no additional software drivers are required

Traffic on the SpaceWire link, speeds up to 400 Mb/s, may be recorded

Each Packet received may be time-tagged to a resolution better than 2 ns. There is no limit to the length of the SpaceWire packets that can be captured and transferred

Use it with devices, instruments, boards, subsystems or complete systems

Use it from almost any computer, any operating system, anywhere, via the Internet and Ethernet

Full software is provided including an API and examples (all with source code), and user interfaces with comprehensive scripting capability

Industry standard Wireshark tools to enable integration with other interfaces

Product Facts

Products conform to ECSS-E-ST-50_12C (31st July 2008)

Receive speeds in the range from 1.2Mb/s to more than 400Mb/s

User selected transmit speeds, available from 1Mb/s up to more than 400Mb/s

Two standard 9-way Micro-miniature D-type SpaceWire socket connectors

External Synchronization with eight SMA connectors on the back of each unit

Options

ER: Error Reporting—tokens defined as errors can be made visible for recording purposes

EW: Event Waveforms – Waveform capture available from a wide range of trigger sources including errors

TT: Time Tags – to a resolution of less than 1.5ns and synchronization between units of plus/minus 3ns

Ordering information

Four Active Ports / Two links

MSR-RG404/8-MS

Eight Active Ports / Four Links

MSR-RG408-MS

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