

## Portable Diagnostic SpaceWire Recorder

### P-DSR (P-DSI-2 & P-SLR-2)

#### Overview

4Links Portable Diagnostic SpaceWire Recorder (P-DSR) is a combination of our P-DSI-2 and P-SLR-2 functions into a single unit. From one unit, SLR function, you can capture, buffer and transmit SpaceWire packets over Ethernet via a TCP/IP socket connection. With the DSI function you have two ports to support, test, and debug SpaceWire networks transmitting and receiving over Ethernet via a TCP/IP socket connection.

#### 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

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 simply as an interface, to detect and resolve issues, or to measure the performance parameters

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

Can detect issues such as a incorrect initialization, loss of flow-control credit, inability to recover after noise disturbance, loss of occasional data characters, timeouts beyond the limits in the standard



#### 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 pairs of standard 9-way Micro-miniature D-type SpaceWire socket connectors

Supplied in a 3U x 8HP housing, with external power supply

#### Options

ER: Error/Event Reporting - tokens defined as errors made visible for recording purposes (DSI-2 & SLR-2)

EW: Event Waveforms – capture from a wide range of trigger sources including errors (DSI-2 & SLR-2)

TT: Time Tags – to a resolution of less than 1.5ns (DSI-2 & SLR-2)

EI: Error Injection— precise error injection and full control over flow-control-credit and nulls (DSI-2)

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