# Data Sheet

# Distributed High Speed Data Recorder / Player

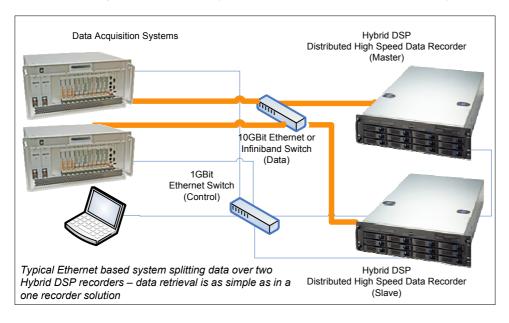
The Hybrid DSP Distributed High Speed Data Recorder A (DHSDR-A) is a high performance modular 'plug and play' digital data recorder and player. The DHSDR-A offers massive storage (up to 24TB in 4U) and performance (more than 600M bytes / sec sustained per unit).

Control and set-up is very simple and flexible. ZeroConf compatible, the DHSDR-A can be automatically discovered on a network. Control is possible via web-interface, SOAP, C/C++ or .NET with additional LXI support available.

Based on Hybrid DSP's commercially available distributed and modular service and data transport software libraries, data can be stored, played back and retrieved to and from multiple DHSDR-A devices as if they were a single unit. Data flow is flexible and powerful.

Input data can come from CameraLink, Serial Front Panel Data Port (sFPDP), 1 Gbit / 10 Gbit Ethernet and Infiniband. Optionally, most third party PCI-Express / PCI-X / PCI digital I/O (e.g. Camera interfaces, Analogue to Digital Converters / Digital to Analogue Converters) can be integrated and controlled remotely.

Data can be processed on the fly during storage – useful for example for snapshots, data compression, filtering etc. As an option, FPGA processing can be incorporated in the data path. During data retrieval or playback data can also be processed on the fly.



### • Reduce Research Time

All hardware, firmware and software components have been selected, integrated and tested for reliability, compatibility and performance.

#### • Reduce Development Time

Flexible yet simple user interfaces accessible from widest possible number of platforms.

#### Build More Ambitious Systems

By permitting the data acquisition units to be positioned at great distances from the recorders, more complex systems can be implemented without sacrificing performance.

#### • Expand When You Need To

If storage or speed requirements increase then it is possible to add additional DHSDR-A units as slaves.

#### • Minimize Cost and Risk

By building on the proven server motherboards and SATA hard drives and controllers, highest performance is available for a low cost. Additionally the massive e-commerce install base of such components guarantees high reliability and service. A 3-year warranty available with all hardware.





## Summary:

Distributed remote high speed storage for data acquisition systems

More than 600M bytes / sec sustained and guaranteed per unit

Massive storage density

- 16 Terabytes in 3U unit
- 24 Terabytes in 4U unit

Supports variety of inputs and outputs

- 1 Gbit / 10 Gbit Ethernet
- Infiniband
- sFPDP
- CameraLink
- LXI support

**Capture Events** 

Filtering / pre-storage processing and snapshots

Receive detailed status info

Web, SOAP, C/C++, .NET interfaces

Flexible data retrieval

Modular / Scalable

#### Customizations e.g.

Built-in ADC / DAC devices

#### Low cost

Hybrid DSP Rotterdamseweg 183c 2629HD Delft Netherlands

Tel: +31 15 2682588 Email: info@hybriddsp.nl