



DDR2001

High Performance Rackmount Digital Data Recorder

Features

- Rackmount (8U) data acquisition solution recording at up to 400 MBytes/second
- Supports up to 512 channels of analog input
- User programmable simultaneous sampling up to 2.5 MHz per channel
- Programmable gain and filter
- IRIG or GPS time stamping
- Removable large capacity disk-based RAID storage
- Extensive signal conditioning options
- Network based control, storage, and data access
- Windows-based software options



DDR2001

The DDR2001 rackmount digital data recorder provides accurate high speed data acquisition for the most demanding applications. Ideally suited for large channel count, high frequency, or transient applications, the DDR2001 is a powerful data recorder which is both easy to use and simple to configure. Supplied with powerful software which allows users to efficiently manage their test data, the DDR2001 is available with a wide range of signal conditioning options to fulfill the most demanding data acquisition challenges. The DDR2001 can be configured with a full complement of PCI based data acquisition hardware, providing users with solutions tailored to their specific needs. Removable high capacity hard drives are used to store the high speed data and can be hot-swapped to extend recording duration in the field. Sampling timing can be provided by either an internal programmable clock (which can also be used as an output to synchronize external equipment), or an external sampling clock. The system is comprised of off-the-shelf high end PC hardware, keeping maintenance costs to a minimum. Also, since Windows® is installed as the main operating system, the user is free to install any other Windows compatible software package (for data analysis, report generation, etc.), and the system is provided with complete emergency recovery disks that can be used to rebuild the internal software in a matter of minutes.

Input Specifications

- Maximum Channels: 512
- Maximum Sampling Rate: 2.5 MHz
24 bit ADC: 108KHz
16 bit ADC: 2.5MHz
- Input Connector- 78 pin D-Shell
- Input Type: 24 bit ADC- differential
16 bit ADC- single-ended
- Input Filter (four options)- None, fixed 4-pole Butterworth, fixed 2-pole Butterworth(programmable), 2-pole Chebyshev, external
- Acquisition Resolution:
24 bit ADC
16 bit ADC
- Input Range: 24 bit ADC:
20Vpp, 10Vpp, 4Vpp, 2Vpp
16 bit ADC: 20Vpp
- Input Impedance- >1 MΩ

Recorder Specifications

- Processor- Intel Quad Core Xeon Processor
- Memory 4GB
- System Drive
- DVD RW Burner
- Keyboard and mouse
- 20" LCD Monitor
- Input Type- rackmount (1U)
- USB, Gigabit Ethernet, etc.
- PCi Expansion: 16 PCi slots and 2 PCi express slots
- Power supply- 1000 W
- Operating system- Microsoft Windows
- Acquisition software- DaqHunter
- RAID Drive: 2TB RAID Level 0 (16 removable disk bays)
- Dimensions- 19 inches (W) x 14 inches (H) x 17 inches (D)

Options

- Time stamping- IRIG/ GPS
- Memory upgrade- Up to 32 GBytes
- Monitor Console: 19" rackmount monitor with keyboard and mouse
- PCi expansion -Up to 13 PCi slots
- RAID: up to 48TByte capacity, Higher RAID level (RAID 1, RAID 5, RAID 10, etc.)
- Signal Connection: BNC cable, BNC panel, etc.
- Signal conditioning: external ICP, charge amp, bridge conditioning, current excitation, current source
- Analysis software- data conversion and display, also supports all major third party analysis packages such as MATLAB, DADiSP, LabVIEW
- Intelligent triggering- level thresholds