



### **DDR-2000**

#### **High Performance Rackmount Digital Data Recorder**

- Rack-mount (5U) data acquisition solution recording at up to 400 MBytes/second
- Supports up to 576 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



The DDR-2000 from DaqScribe Technology provides accurate high speed data acquisition for the most demanding applications. Ideally suited for large channel count, high frequency, or transient applications, the DDR-2000 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 DDR-2000 is available with a wide range of signal conditioning options to fulfill the most demanding data acquisition challenges.

The DDR-2000 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. For high channel count applications, additional data acquisition hardware can be provided in an external rack mount expansion chassis.

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.



## DDR-2000 SPECIFICATIONS

### Input Specifications

Maximum number of channels 576  
 Maximum sampling rate 2.5 Msamples/second per Channel  
 Input connector 78 pin D-Shell  
 Input type Differential or single-ended  
 Input filter Four options: None, or fixed 4-pole Butterworth, or fixed 2-pole Butterworth with a programmable 2-pole Chebyshev, or external  
 Acquisition resolution 24-bits up to 100 kHz, 16-bits up to 2.5 MHz  
 Input range Selectable up to 20 Vpp  
 Input impedance >1 MOhm

### PC Specifications

Processor Minimum 2.6 GHz dual Xeon processor with 2 GBytes RAM  
 Input type Rackmount keyboard/touchpad with 17" LCD (1U)  
 Peripherals 80 GBytes HD (min), dual Gbit Ethernet, video, audio, USB, RS-232, DVD R/W  
 Expansion Up to 5 PCI slots  
 Power supply 650 W, redundant  
 Operating system Windows  
 Acquisition software SafariCS or PI660 or EDAS  
 Data drives Six removable 36 GBytes drives (expandable to ten 144GB drives)

### Options

Time stamping IRIG or GPS  
 Memory upgrade Up to 4 GBytes  
 Additional expansion Up to 18 PCI slots  
 Signal conditioning 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, channel combinations, repeated or single events, etc.

### DDR Versions Available

	Max # Chan	Max Data Rate (MBytes/second)	Portable	Remote Operation	Intelligent Triggering	Multi-DDR Synch
DDR-16	256	0.2		•	•	•
DDR-100	64	6	•	•		•
DDR-500	32	30	•	•		•
DDR-1000	64	50 (100 for transient)			•	•
DDR-1500	64	160	•	•	•	•
DDR-2000	576	400			•	•

\* specifications subject to change without notice