

Freedom DAS (Data Acquisition System) »

The Freedom DAS is Olson's data acquisition system for Structural Health Monitoring (SHM).

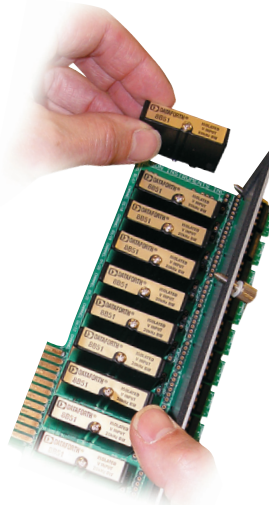


Features:

- 12" XGA diagonal color backlit screen (1024 x 768) for sunlight/night viewing
- Windows XP based low power 1.1 GHz Intel Pentium M processor 512 MB DRAM (1024 MB DRAM optional)
- 32 slots for Dataforth 8B signal conditioning modules in removeable module bay, 16 slot option for Dataforth SCM5B modules
- 120 GB hard drive with external CD-RW (optional larger hard drive)
- ~6-8 hour run time internal rechargeable lithium ion batteries
- Shock mounted, weather resistant, field ruggedized design
- Weathertight mouse and keyboard
- 1 - 10/100 MB LAN, USB 2.0 (2), RS-232 Serial & Parallel Ports
- 1 - External XGA (1024 x 768) port for external monitor
- National Instruments 16 channel 1.25 MHz, 16 bit PCI data acquisition card standard, optional cards available
- Universal 110/220 VAC, 50/60 Hz power supply/charger
- External 12 volt automotive cigarette lighter adapter
- Weight: 23 lbs (10.5 kg)
- Dimensions: 18.5" x 14" x 6" (47 x 36 x 15 cm)

The Freedom DAS PC is a field ruggedized and battery powered multiple system platform for structural health monitoring and other industries.

Applications for this platform include modal testing/vibration monitoring for structures and machinery, acoustic measurements, monitoring temperature changes, strain gages (¼ to full bridge), and recording potentiometer/LVDT displacements. In essence, the Freedom DAS PC can be used to measure/monitor any voltage or change in resistance that can be recorded. This platform has the unique capability of combining data collection and analyses (both in the field and in the office) into a single transportable battery operated unit.



Internal Dataforth 8B Modules

for easy-to-switch signal conditioning to support measurement of strain, temperature, pressure, potentiometer, etc. National Instruments™ Labview software based data acquisition for up to 32 channels.

(16 Channel Option for Dataforth SCM5B Modules)

8B Modules For:

» Analog Voltage (V)

» Analog Current (I)

» Linearized 2 or 3 Wire RTD

» Linearized 4 Wire RTD

» Linearized Thermocouple

» Potentiometer

» Strain Gauge (¼ or full)

» Frequency

» True RMS Voltage

» 2 - Wire



Custom Systems Available - Give Olson a call at
303.423.1212 or email info@OlsonInstruments.com