



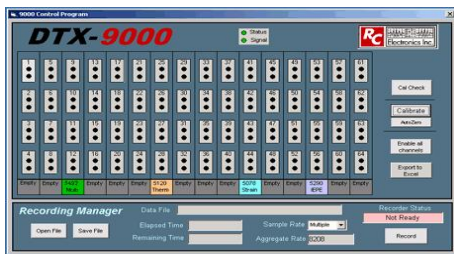
DTX-9000

Integrated Signal Conditioning Data Recorder



- 64 Channels in a standard 5U rack mount chassis
- DC to 800 kHz analog bandwidth (2 MHz sampling)
- Local and remote data storage with redundant drives
- Local display/control or remote operation via Ethernet
- Automated multi-mode signal conditioning modules

Each DTX-9000 Signal Conditioning Data Recorder provides up to 64 channels of state-of-the-art signal processing for a variety of environmental test sensors, along with wideband data recording capability in a compact (5U) chassis. A comprehensive user GUI running on the embedded Windows OS can be run locally with the addition of a user keyboard, mouse and video terminal, or remotely via the integrated Ethernet connection as a remote desktop application.



DATAMAX DISPLAY

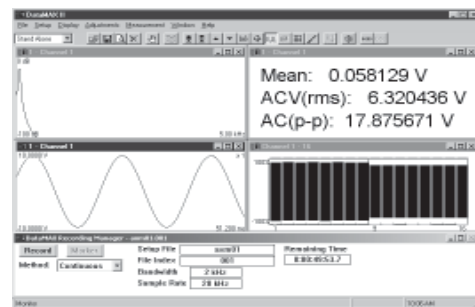
Integration with the complete suite of DATAMAX display utilities allows for real time monitoring of data recording to verify signal integrity during the test sequence. Local displays, along with multiple remote monitor stations, can be easily configured to match multiple signal types.

SIGNAL CONDITIONING

- Strain Conditioners
- IEPE Conditioners (w/TEDS)
- Instrumentation Amplifiers
- Frequency to Voltage Conversion
- Thermocouple Conditioners
- Multi-Mode Conditioners



DTX-5000 modules: Strain Amplifiers with voltage excitation and internal bridge completion, linearized Thermocouple Amplifiers with cold-junction compensation, Frequency-to-Voltage converters with dual input pulse conditioners for both signal and direction sensing, Constant Current sources with TEDS capability, high impedance Charge Amplifiers and Differential Instrumentation Amplifiers with 350V common mode capability.



- Time based analog signal displays
- Frequency based spectral displays
- Multiple channel overlays
- Digital readouts in Engineering Units
- Bar graph displays (with peak hold)
- Customized user configuration



Technical Specifications

Chassis

Each DTX-9000 chassis accommodates up to 16 unique four-channel plug-in DTX-5000 Signal Conditioning modules. Storage options include internal data storage or dual removable external hard drives.

- Each channel has a 16bit Signa Delta digitizer (ADS1601) sampling at 1 MHz.
- Each channel has a dedicated DSP (TMS320-5402) sampling at 100 MHz.
- 64 channels per 5U or 6U chassis which can be slaved together without any loss of capabilities.
- Better than 0.05 % accuracy, input to output, including thermal errors.
- Standard TCP-IP GB ethernet for control, setup and live data monitoring.

DTX-9017LE: 5U Rack Mount Chassis

- Supports 16 Modules (64 Channels)
- Standalone or Web Based Control
- Pentium 4 Processor
- 10/100 baseT Ethernet
- Graphical User Interface
- LEMO Input Connectors
- DB25/BNC Output Connectors



Signal Conditioning Modules

DTX-5078: Automated Strain Conditioner

- Wideband/High Gain Inputs**
- Gain Range: 50 to 5,000
- Frequency: DC to 100 kHz
- Bridge Completion** ($\frac{1}{4}$, $\frac{1}{2}$, or Full)
- Shunt Calibration** (Local or Remote)
- Voltage Excitation** (Local or Remote Sense)

DTX-6078: Automated Strain Conditioner

- Extended Bandwidth and Gain Range**
- Gain Range: 1 to 10,000
- Frequency: DC to 400 kHz
- Bridge Completion** ($\frac{1}{4}$, $\frac{1}{2}$, or Full)
- Shunt Calibration** (Local or Remote)
- Voltage Excitation** (Local or Remote Sense)

DTX-5636: Frequency to Voltage Converter

- Wide Extended Conversion Range**
- 0.01Hz to 100 KHz
- Dual Inputs per Channel** (Signal & Direction)
- 10 mV to 250 Volts
- Isolated: 100 Hz to 100 kHz
- Quadrature/Phase Detection**
- Voltage Excitation** (Local or Remote Sense)

DTX-5120: Linearized Thermocouple

- Extended Temperature Range**
- Range: -300 to 2000°C
- Wideband Frequency Response**
- DC to 100 kHz
- Thermocouple Linearization**
- Type B,E,J,K,N,R,S,T
- Cold Junction Compensation**

DTX-5290: ICP Conditioner

- Constant Current Source**
- Programmable: 2 to 20 mA
- Compliance Voltage: 24V
- Wideband Frequency Response**
- Gain Range: 1 to 200
- Frequency: 0.2 Hz to 100 kHz

DTX-6290: Extended Range ICP Conditioner

- Constant Current Source**
- Programmable: 1 to 20 mA
- Compliance Voltage: 24V
- Extended Bandwidth and Gain Range**
- Gain Range: x1 to x2000
- Frequency: 0.02 Hz to 400 kHz

DTX-5312, 5322, 5332: Instrumentation Amplifiers

- Optimized Gain Ranges**
- M5312: Gain 0.04 to x10
- M5322: Gain x1 to x200
- M5332: Gain x50 to x10,000
- Wideband Frequency Response**
- DC to 100 kHz
- Ultra-stable Low Noise Amps**
- Output Noise: 1 mV rms
- Stability: 50 ppm/°C
- Voltage Excitation** (Local or Remote Sense)
- Input Offset Compensation**

DTX-6322: Instrumentation Amplifier

- Extended Gain Range**
- Programmable 0.04x to 10,000x
- Extended Wideband Frequency Response**
- DC to 400 kHz
- Ultra-stable Low Noise Amps**
- Output Noise: 1 mV rms
- Stability: 50 ppm/°C
- Input Offset Compensation**
- Voltage Excitation**