



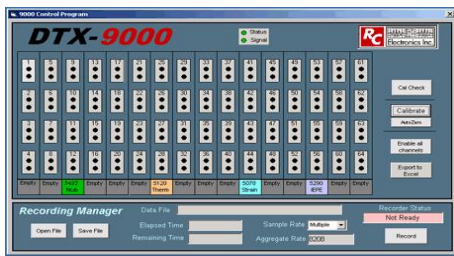
DTX-9417

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

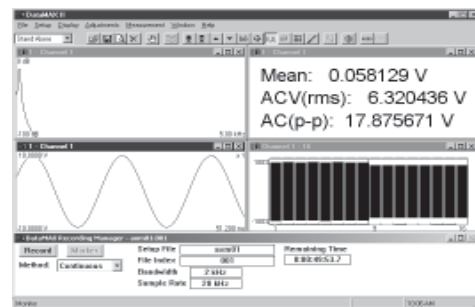
Integration with the complete suite of DATAMAX display utilities allows for real time monitoring of data recording to verify signal integrity during the test sequence. Local displays, along with multiple remote monitor stations, can be easily configured to match multiple signal types.

SIGNAL CONDITIONING

- Strain Conditioners
- IEPE Conditioners
- Instrumentation Amplifiers
- Constant Current & Voltage
- Thermocouple & RTD
- 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, 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 (1/4, 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 (1/4, 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