



High-Speed Testing. High-Speed Solutions.

Introducing the TMX High-Speed Data Acquisition System Redefining High Speed

High Speed Setup

The modular TMX accepts all of your inputs, including analog, video, audio, IRIG, GPS, MIL-1553 and more — all in one system!

High Speed Data Capture

Capture up to 96 channels to a dedicated 1 TB hard drive at sample rates of 800 kHz per channel. You'll never miss an important high speed event.

High Speed Review and Transfer

The TMX allows hundreds of GBytes of data to be reviewed in seconds. Transferring large data files in seconds is easy.

High Speed Analysis

Innovative TMX technology processes real-time advanced math calculations on the fly, with no latency.

High Speed Solutions

The TMX maximizes efficiency and productivity, getting you to the solution faster than ever.



The TMX user interface is completely customizable. Your test setup is loaded at the touch of a finger. A maximum 800 kHz sample rate and 16 bit A/D per channel provide the most accurate measurements.

That's High Speed Data Acquisition.



Read the full specifications at
www.astro-med.com/tmx

 **Astro-Med, Inc**
TEST & MEASUREMENT PRODUCT GROUP

TMX MAINFRAME

MAINFRAME CHASSIS

Maximum Analog Modules	3 (6 with optional expansion unit)
Maximum Analog Waveforms	48 (96 with optional expansion unit)
Event Inputs (TTL)	16
Derived Channels	+, -, x, ÷, Exponential, Sin, Cos, Tan, √, Absolute Value

DATA ACQUISITION RECORDING

Operational Modes	Scope, Review, Real-time (strip-chart)
Recording Method	Internal removable 1 TB SATA disk drive
Time Stamp	Time and date automatically saved with data
Trigger Point	Amount of pre and post trigger is user adjustable

COLOR DISPLAY

Type	Active matrix color LCD (TFT)
Viewing Area	17"/43.18 cm (diagonal)
Resolution	1280 x 1024
Touch	Full screen, resistive

COMPLIANCE/ENVIRONMENTAL

Operating Temp	40 to 105 °F (5 to 40 °C)
Operating Humidity	10 % to 90 % non condensing
Shock	MIL-STD-810F Method 516.5, Procedure I
Vibration	MIL-STD-810F Method 514.5, Procedure I

PHYSICAL

Enclosure	Aluminum, with armored end caps
Dimensions	14.5" (36.8 cm) H x 19" (48.3 cm) W x 7.5" (19.1 cm) D (without handle)
Weight (including 3 modules)	35 lbs (15.78 kg)

INTERFACE

Ethernet	1000BaseT
VGA	For displaying data on an external monitor
USB 2.0 (8 ports/unit)	For external peripherals and file export
Expansion Port	For connection of optional TMX-E

TMX OPTIONS—INPUT MODULE SPECIFICATIONS

UNIV-6 UNIVERSAL ISOLATED VOLTAGE MODULE WITH DC BRIDGE

UNIV-6 GENERAL SPECIFICATIONS

Channels (per module)	6
Maximum Sample Rate/Ch	800 kHz (400 kHz with TMX-E)
Maximum Bandwidth	100 kHz
Isolation	250 Vrms or DC, Cat II

UNIV-6 SINGLE ENDED VOLTAGE INPUT

Input Type	Isolated, AC/DC coupled
Specified Ranges	200 mVFS to 800 VFS

UNIV-6 DIFFERENTIAL VOLTAGE INPUT/BRIDGE MEASUREMENTS

Input Type	Differential, DC coupled
Specified Ranges	5 mVFS to 2 VFS
Excitation	Isolated 10 V @ 30 mA

NIDV-16 NON-ISOLATED DIFFERENTIAL VOLTAGE MODULE

Channels (per module)	16
Maximum Sample Rate/Ch	200 kHz (100 kHz with TMX-E)
Maximum Bandwidth	40 kHz
Input Type	Differential, non-isolated DC coupled
Maximum Rated Input	± 50 VDC (35 Vrms)
Specified Ranges	80 mVFS to 100 VFS

ITCU-12 ISOLATED THERMOCOUPLE MODULE

Channels (per module)	12
Input Type	Type U miniature thermocouple (12 connectors)
Isolation	250 Vrms or DC, Cat II
Maximum Bandwidth	5 Hz update rate (TC sampled at 2.5 Hz)
Thermocouple Types	J, K, E, T, N, B, R, S

TMX OPTIONS—ADVANCED

TMX-R RACKMOUNT VERSION (FITS STANDARD 19" RACKS)

Maximum Analog Modules	6
Maximum Analog Waveforms	96
Dimensions	15.75" (40 cm) H x 18.97" (48.2 cm) W x 17.15" (43.6 cm) D

TMX-VA VIDEO/AUDIO ACQUISITION

Analog Input Type/Connector	Composite/BNC
Supported Video Formats	NTSC, PAL
NTSC/PAL Capture Rate	30/25 fps (frames per second)
Audio Capture Rate	Up to 44.1 kHz

TMX-E EXPANSION CHASSIS

(REQUIRES MAINFRAME CHASSIS FOR OPERATION)

Maximum Analog Modules	3
Maximum Analog Waveforms	48
Dimensions	14.5" (36.8 cm) H x 19" (48.3 cm) W x 5" (12.8 cm) D
Weight (including 3 modules)	15 lbs (6.8 kg)

To read full specifications, please visit www.astro-med.com/tmx

Specifications are subject to change. Registered trademarks belong to their respective companies.

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