



Optional MX-8 Multiplexer

FEATURES

- Single or multipoint thickness measurements
- Connects up to 8 transducers
- User selectable: number of channels, channel sequencing, and channel rate
- Uses contact, delay line, and immersion transducers
- Transducer frequency range 2 – 30 MHz
- Wide thickness range, from 0.003 to 20 in (0.080 mm – 500 mm) depending on application
- Resolution up to 0.0001" (0.001 mm)
- A-Scan display for waveform verification
- Application Auto-Recall with stored standard and custom setups
- Alphanumeric file-based datalogger stores 18,000 thickness readings or 1,750 waveforms
- Handheld, intuitive operation, long battery life

MX-8 MULTIPLEXER

Number of Channels: 1 to 8, user selectable

Channel Switching Rate: 1, 2, 4, 8, 16, or 20 Hz, user selectable

Size: 3.2" x 5.9" x 1.25"
(149.9 mm x 81.3 mm x 31.8 mm)

Weight: 7.7oz. (.22 kg)

MULTIPOINT & SINGLE THICKNESS MEASUREMENT GAGE

The Panametrics- NDT™ 25MX PLUS is an ultrasonic precision thickness gage that provides cost-effective solutions in applications where the opposite side of the test material is difficult or impossible to reach. Multipoint and single thickness measurements can be made on a wide variety of materials including metal, plastic, rubber, glass, fiberglass, and composites.

Multipoint Thickness Measurements

Connected to the optional MX-8 multiplexer, the 25MX PLUS has the ability to collect and display thickness measurements from up to 8 separate transducers.

Special software on the 25MX PLUS allows the user to select:

- Number of channels (1-8)
- Mux Mode
 - Off
 - Single Channel (manual switching)
 - Single Sequence (switch through selected channels on command)
 - Sequence (continuous channel switching)
- Channel Rate (1, 2, 4, 8, 16 or 20 Hz; thickness output and channel number)

Single Thickness Measurements

The 25MX PLUS operates as a 'standard' precision thickness gage when not connected to the MX-8 Multiplexer.

25MX PLUS SPECIFICATIONS*

MEASUREMENT:

Mode 1: Time interval between excitation pulse and first backwall echo, using contact transducers.

Mode 2: Time interval between the first interface echo after the excitation pulse and the first backwall echo, using delay line or immersion transducers.

Mode 3: Time interval between successive backwall echoes following the first interface echo after the excitation pulse, using delay line or immersion transducers.

Thickness Measurement Range:

Steel: 0.006 - 20.000 inches
(0.150 - 508.00 mm)

Plastic: 0.003 - 2.0000 inches
(0.080 - 50.00 mm)

Thickness range depends on material, transducer, surface condition, temperature, and SETUP selected.

Material Velocity Range:

0.02000 - 0.55110 inch/ μ S
(0.5080 - 13.9979 mm/ μ S)

Resolution: keypad selectable:

LOW:	0.01"	0.1 mm
STANDARD:	0.001"	0.01 mm
HIGH:	0.0001"	0.001 mm

Battery: 6 V Rechargeable NiCad battery pack, or field-replaceable alkaline AA batteries

Battery Life: 25 hours in normal measurement mode with backlight off

Fast-Charger: Two-hour Fast Charger with universal voltage

Auto Power Off: On or off

Transducer Frequency Range:
2-30 MHz (-3 dB)

Operating Temperature:
-10°C to +50°C. (+14° to 122°F)

Keypad: Sealed color-coded keypad with tactile and audible feedback

Case: Water-resistant, gasketed Lexan® case with sealed connectors

Metric/English Units

Min/Max Mode

Two Alarm Modes: Programmable Hi-Low Alarm with audible and visual indicators.

- 1) Standard Hi-Low
- 2) Previous thickness
 - Absolute
 - Percentage

Two Differential Modes:

- 1) Thickness difference between actual measurement and reference value.
- 2) Percent difference between actual measurement and reference value.

Application Auto-Recall: Automatically adjusts internal parameters and zero offset for a wide variety of transducers.

Stored Standard Setups: 25 stored transducer setups to allow fast, easy calibration for our standard transducers.

Stored Custom Setups: Up to 35 stored custom transducer setups for best performance in special applications.

Size: 9.375 x 5.45 x 1.5"
(238 x 138 x 38 mm)

Weight: 2.1 lbs. (0.95 kg)

INTERNAL DATALOGGER

Datalogger and RS-232: Identifies, stores, recalls, clears, and transmits thickness readings, waveform images, and gage setup information via the RS-232 Serial Port. Baud Rate, Word Length, Stop Bits, and Parity are adjustable from the keypad.

Maximum # of Stored Values:

- Standard: 18,000 thickness readings or 1,700 waveforms with thickness
- Upgrade 1: 36,000 thickness readings or 3,400 waveforms with thickness
- Upgrade 2: 54,000 thickness readings or 5,100 waveforms with thickness

Location Codes: 8-character file name plus 16-character alphanumeric location code input. Multiple Comments per location.

File Structures: 7 standard or custom application-specific file structures

Reports: On-gage reporting of: Summary with statistics, Min/Max with locations, and File Comparison. On-screen comparison of current and previous readings.

DISPLAY

Display: Liquid Crystal Display with backlight. Contrast keypad adjustable. Display area 4.0 x 3.39 inch (102 x 86 mm)

Backlight, Zoom Mode, Freeze Mode and Hold/Blank

Rectification: RF, half wave positive or negative, and full wave

Waveform Display Range and Delay Control

ORDERING INFORMATION

Model 25MX PLUS Digital Ultrasonic Thickness Gage, AC or Battery Operation, 50-60Hz, with Internal Alphanumeric Datalogger. Including: Universal Quick Charger/AC Adapter Transducer Cable, Test Block, Couplant, RS-232 I/O Cable, Carrying Case, Instruction Manual and Two Year Limited Warranty

OPTIONAL ACCESSORIES

MX8 MX-8 Multiplexer

PLUS/RPC Rubber Protective Pouch with Neck Strap

36DLP/SPC/KIT Protective Pouch with Neck Strap

WIN25DLPLUS Interface Program

25DLP/EW Extended Limited Warranty, 3rd Year

2214E 5-Step Test Block, 1018 steel, English Units: .100", .200", .300", .400", .500" metric available

2213E 5-Step Test Block, Aluminum, English Units: .100", .200", .300", .400", .500" metric available

26DLPLUS/HDC Heavy Duty Shipping Case

Please contact us for other accessories available with the Model 25MX PLUS



Printed 8/2004

© 2004 R/D Tech Instruments Inc., All Rights Reserved.

*All specifications are subject to change without notice.

Panometrics, Panometrics-NDT and the Panometrics-NDT logo are trademarks of Panometrics Inc.

Lexan® is a trademark of General Electric

Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies

PANAMETRICS-NDT™

A Business of R/D Tech Instruments Inc.

48 Woerd Ave, Waltham, MA U.S.A.
TEL 781-899-2740 • 800 225-8330 in North America
e-mail: info@panametrics-ndt.com

www.panametrics-ndt.com

