

PRECISION QUALITY CONTROL INSTRUMENTS SINCE 1958



Data-Logging Wall & Coating Thickness Gauge Model TI-CMXDLP

Two versions are available

TI-CMXDLP

Black and white model

TI-CMXDLP-C

Color model

- Dual and Single Element probes are available for nearly any application
- Bar graph with user-set start /end values providing highest resolution around the target thickness value
- 64 custom gauge setups can be stored for quick measurement of different materials
- Memory for over 200,000 measurements in Grid or Sequential format
- RS-232 output for transferring data to a Printer or PC
- Measures coatings up to 0.100"
- Hi/Lo Alarm Limits with audible and visual indicators
- Two Year Warranty
- CE Certified
- Supplied with NIST Traceable Calibration Certificate
- Adjustable gain provides a 8 db gain adjust range (42–50 db)



TI-CMXDLP-C

The top-of-the-line model in the CMX Series of gauges measures both coating and wall thickness quickly and accurately—from only one side.

The **TI-CMXDLP** automatically eliminates the coating from the wall thickness measurement (Pulse-Echo mode), enabling users to locate the finest corrosion and pitting—without removing the coating.

It features an A-Scan Display Mode that graphically shows the wave form echoes, allowing gauge settings to be tuned for optimal performance—critical on challenging measurement tasks. The new E-EV Operating Mode (Echo-Echo-Verify), also known as Triple-Echo Mode, provides additional assurance that the displayed measurement is accurate and fully verified by subsequent echoes.

The **TI-CMXDLP-C** features an oversized, backlit graphic color LCD with easy-to-read fonts, graphics and display codes showing all critical settings including velocity, operating mode, alarms, scan mode and more

With ultra hi-speed processing (display update refresh of 120 times/second), TI-CMXDLP-C is also an extremely effective tool when used in the Flaw “Prove-up” Mode, simulating the function of a Flaw Detector at a fraction of the cost to identify and locate cracks, dis-bonds, weld defects, etc. It also includes a “dampening feature” which helps filter the raw waveform data to clean-up the signal, especially with very low and very high frequency probes.



TI-CMXDLP & TI-CMXDLP-C Specifications

PHYSICAL

Size:

2.5 in x 6.5 in x 1.24 in
(63.5 x 165 x 31.5mm)

Weight:

13.5 oz (with batteries).

Keyboard:

Membrane switch pad with 12 tactile keys.

Operating Temperature:

14 to 140F (-10C to 60C)

Case:

Extruded aluminum body with nickelplated aluminum end caps (gasket sealed).

Data Output:

Bi-directional RS232 serial port. Windows® PC interface software.

Display(Two Options):

1/8in VGA grayscale display (240 x 160 pixels). 25 Hz screen refresh rate.

1/4 VGA AMOLED color display (320 x 240 pixels). 120 Hz screen refresh rate.

ULTRASONIC SPECIFICATIONS

Measurement Modes:

Coating Off: Pulse-Echo (P-E)

Coating On: Pulse-Echo Coating (PECT)

Temp Comp: Pulse-Echo Temperature Compensation (PETP)

Thru-Paint: Echo-Echo (E-E)

Thru-Paint Verify: Echo-Echo Verify (E-EV)

Coating Only: Coating (CT)

POWER SOURCE

Three 1.5V alkaline or 1.2V NiCad AA cells
Alkaline: grayscale 35 hrs, color 12 hrs.
Nicad: grayscale 10 hrs, color 5 hrs.

Power saving DIM feature for color display.

Auto power off if idle 5 minutes.

TRANSDUCER

Transducer Types:

Dual / Single Element (1 to 15 MHz).

Flaw Prove Up (1 to 10 MHz).

Custom transducers and cable lengths available for special applications.

MEASURING

Pulse-Echo Mode (P-E):

(Pit & Flaw Detection) measures from 0.025 to 19.999 in (0.63 to 508mm).

Pulse-Echo Coating Mode (PECT):

(Material, Coating, Pit & Flaw Detection);
Material: 0.025 to 19.999 in (0.63 to 508mm). Coating: 0.001 to 0.100 in (0.01 to 2.54mm).

Pulse-Echo Temp Comp Mode (PETP):

(Pit & Flaw Detection) Auto temperature compensation - measures from 0.025 to 19.999 in (0.63 to 508mm).

Echo-Echo Mode (E-E):

(Thru Paint & Coatings) measures from 0.100 to 4.0 in (2.54 to 102mm). Range will vary +/- depending on the coating.

Echo-Echo Verify Mode (E-EV):

Thru Paint & Coatings) measures from 0.100 to 1.0 in (2.54 to 102mm). Range will vary +/- depending on the coating.

Coating Only Mode (CT):

(Coating Thickness) Measures from 0.0005 to 0.100 in (0.0127 to 2.54mm). Range will vary +/- depending on the coating.

Flaw Mode: Basic mode using angle beam transducers. Color offers D1.1 linearity.

Resolution: +/- 0.001 in (0.01mm).

Velocity Range:

0.0492 to 0.5510 in/ μ s
(1250 to 13995 m/sec)

Single and Two point calibration option for material & coating, or selection of basic material types.

Units: English & Metric

DISPLAY

Large Digits:

Standard thickness view.

Digit Height: 0.700 in (17.78mm).

Color 0.565 in (14.35mm).

A-Scan: Rectified +/- (flaw view), RF (full waveform view).

B-Scan: Time based cross section view.

Display speed; grayscale (15 secs per screen), color (variable speed).

Scan Bar Thickness: 6 readings per second. Viewable in B-Scan and Large Digit views.

Repeatability Bar Graph: Bar graph indicates stability of reading.

Feature Status Bar: Indicates features currently active.

MEMORY (CMX DL)

Log Formats:

Grid (alpha numeric)

Sequential (auto identifier)

Cell contents:

Graphics On: grayscale 16,000 & color 8,000 readings, A/B Scan image, & gauge settings for every reading.

Graphics Off: 210,000 readings (coating, material, min & max).

OBSTRUCT to indicate inaccessible locations.

CONNECTIONS

Output: RS232 serial interface.

PC software & USB adapter cable.

Transducer Connectors: Two LEMO 00 connectors.

CERTIFICATION

Thickness Gauge: Factory calibration traceable to NIST & MIL-STD-45662A.

Warranty: 2 year limited



The TI-CMXDLP is supplied as a complete kit with the gauge, probe, 4 oz. bottle of coupling fluid, 2 AA batteries, NIST-Traceable Calibration Certificate, operating manual, RS-232 cable, RS232 to USB adapter & data transfer software—all in a foam-fitted carrying case.



For additional information or to place an order CALL TOLL FREE 1-800-645-4330

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