

Nova TG110-DL

Ultrasonic Thickness Gauge with
Through Paint Capability



TemaFlux



NDT Systems

Worldwide Excellence In Ultrasonics

Nova TG110-DL is an ultrasonic thickness gauge, perfect for general purpose wall thickness measurements for corrosion detection including scrolling B-Scan which presents a cross section view of the material under test, a 50,000 point data logger, alarms and more.

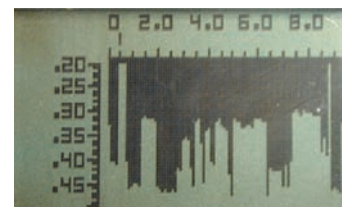
The TG110-DL offers an outstanding value and feature set that no other thickness gauge can match in a hand held digital ultrasonic thickness gauge. Highlight features include:

- User friendly, plain text menus
- 128 X 64 graphic display
- Easy grip all aluminum sealed case
- Auto probe recognition
- Legacy probe library
- Fully adjustable velocity
- 50,000 points data logger
- Scrollable spread sheet view
- In-field option upgradeable
- High speed scan mode
- Backlight
- Single point calibration
- 2 Point calibration
- High & Low alarm levels
- Quick View thickness bar
- RS232 I/O
- B-Scan display
- Through paint capable



This is a test			
Row:1	Col:1		
0.280	0.513	0.746	0.979
0.326	0.559	0.792	1.025
0.373	0.606	0.839	1.072
0.419	0.652	0.885	1.118
0.466	0.699	0.932	1.165

Review the log in a full spread sheet mode. Pan & Scroll rows & column. Simple & intuitive.



Actual Encoded B-Scan results obtained using optional probe cart. Similar results can be achieved using the standard time encoded B-Scan.

Applications:

Metals, plastics, ceramics, glass or virtually any other material which conducts ultrasound can be accurately gauged over a wide range of thickness. An optimized combination of high penetrating power and resolution make the miniature Nova TG110DL the choice for a countless variety of thickness measurement jobs, whether in the plant, field or the lab. One of the most outstanding uses for the TG110DL is to assess material thinning due to corrosion or erosion, including many types of pitting action.

The Nova TG110DL has proven ability to handle an exception range of adverse gaging conditions such as rough surfaces, contours and high temperatures, even tough to penetrate materials like cast iron.

You'll find the TG110DL at home in rugged field sites like refineries, pipelines and construction jobs, as well as shipyards, foundries, power plants, and throughout industries like automotive, mining, railroads, and primary metals producers, even in food processing, paper production, plastics, ceramics and glassmaking.

Just a small example of applications include:

heat exchanger tubing, rolls, pressure vessels, machined parts, flanges, bridges, airframes, aircraft windows, glass plate, vessels, plastic shapes and pipe and containers, ship hulls/decking storage tanks, bulkheads boilers, axles, wheels, rails, steam lines, castings, pipes/tubing, plates/slabs/blooms casings, billets/bars, extrusions, forgings beams/struts and more.

The Nova TG110-DL defines the standard for performance and value in Ultrasonic Thickness Gauges. It would be difficult, if not impossible to find a gauge offering the long list of features the TG110-DL does. For about the price of the competition's current fixed velocity Gauge NDT Systems is offering a fully loaded gauge which can be upgraded in the field with optional software components. The TG110-DL is housed in a custom, all aluminum enclosure with gasketed ends. The case is designed for maximum comfort while offering the user maximum grip along the sides and back surfaces. Most other gages have smooth surfaces that once wet with couplant are difficult to hold.

The display is a full 128x64 pixels (49 mm W x 31 mm H) and incorporates simple language text for all menus. Try that on the usual 7 segment display unit. Along with the 12.5 mm high primary numeric readout

area an analog style bar is located at the bottom of the screen and represents a visual indication of the current thickness. This is particularly useful while in the high speed scan mode. The eye can perceive these linear movements much easier than rolling digits therefore general thickness trend information is easier to interpret. Additionally, a graphic display permits logged data to be displayed in a grid fashion, much like a spreadsheet. Also the user can review the log by scrolling through the rows and columns much like a spreadsheet. Any value above or below a preset value will cause that cell to flash in the spread sheet view.

Other features included single and dual point calibration capability, high and low alarms, high speed scan mode, optional B-Scan and through paint capability.

Required Accessories

	Model	Description	Range	Frequency	Diameter
	TG-506	Standard Probe (-10°C - 120°C) Dual-element, top-mounted microdot connectors	1 to 508 mm	5 MHz	10 mm
	TG-556	Extended Temperature Standard Probe (-10°C - 315°C) Dual-element, top-mounted microdot connectors	1 to 508 mm	5 MHz	10 mm
	TG-560P	Through Paint Probe (Multi-Echo) Dual-element, top-mounted microdot connectors 2.75mm 75mm Base Material in through paint mode. <i>NOTE: Max Paint Thickness 2mm. 5 MHz, 10mm diameter element.</i>	1 to 508 mm	5 MHz	10 mm
	TG-505	Mini Probe Dual-element, non-detachable side-mounted cable	1 to 50 mm	5 MHz	7.5 mm
	TG-208	Hi-Power Probe Dual-element, intermittent operating temperature to approximately 316°C, top-mounted microdot connectors	5 to 1250 mm	2.25 MHz	15 mm
	TQ-506	Ultra-Hi-Temp Probe Dual-element, intermittent operating temperature to approximately 538°C, top-mounted microdot connectors, fused quartz delay line	5 to 250 mm	5 MHz	10 mm
	TG-502	Subminiature Probe Dual-element, non-detachable side-mounted cable	1.25 to 25 mm	5 MHz	5 mm
	BH-1	Slip-On Flared Probe Holder Aluminum, with recessed hex head set-screw, for TG-506 & TG556 probes.	-	-	-
	BH-2	Slip-On Flared Probe Holder Aluminum, with recessed hex head set-screw, for TQ-506 ultra-hi-temp probe.	-	-	-



High Temp Transducer TG790 (Shown with Optional Armored Cable)

Extended Temperature Dual Delay Probe
(-10°C - 500°C Short Duty Cycle)
1 mm to 250 mm Range.
Incorporates virtually zero drift delay lines for optimal accuracy on elevated temperature materials.
11 mm Tip Diameter with wear ring indicator



Technical Specifications:

Display:

128 x 64 Graphic (49 mm W x 31 mm H)
Backlight - On / Off / Auto with reading
Last reading hold
Analog style scan bar (scale adjustable)

Physical:

75 mm Wide X 31 mm Deep X 122 mm Long
All Aluminum with gasketed end caps

Range:

0.5 mm - 1250 mm
Inch/mm selectable

Resolution:

0.025 mm

Velocity Range:

1225 to 24975 m/s fully adjustable.

Calibration:

Auto Zero / Single and Dual point Calibration

Pulser / Receiver:

Up to 200 pulses per sec in high speed mode.
Auto or user selectable gain.

Probe / Sense:

- Dual Element
- Patented Auto Probe Recognition or library selectable from menu.
- Permits legacy probe use from instruments such as Nova 100D

Differential Reading mode

Difference + or - to set thickness

Coupling Indicator

Alarm:

LED Thickness High, Low or High/Low

Input /Output:

RS-232, Download Data from logger

Memory:

50,000 point data logger. 30 character alpha numeric identification of files.

B-Scan Features:

'T' Scan - Time encoded 'B' Scan (Included)
Encoded B-Scan (Optional)

Through Paint capability (Optional)

Power Requirements:

2AA Batteries

Battery Life:

Up to 200 Hours

Standard Package Includes:

- Nova TG110-DL
- 2AA Size Batteries
- TG506 with LMD1 Cable
- Bottle of Couplant
- Plastic Carry Case

CE Approved

Manufactured in facilities meeting ISO9001 manufacturing processes

Note: Specifications are subjected to change without notice for better enhancement of the product.

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