Features

- Range of display options: A-Scan, B-Scan, Pulse-Echo, Echo-Echo
- 0.001mm high resolution
- Adjustable gain: -30dB to 70dB range
- Automatic gain control (AGC)
- User definable setups
- Multiple language display
- Multiple calibration and material selection options
- High speed scan: 32 readings per second
- Differential mode
- Minimal thickness alarm
- Data output and storage: 12,000 readings and waveforms
- ElcoMaster® data management software

P-E   **E-E**   **I-E**   **B-Scan**   **A-Scan**

PG70ABDL offers inspectors a graphical representation of the material's thickness with greater precision.

With a user selectable resolution of either 0.01mm or 0.001mm (0.001/0.0001 inch) the PG70ABDL can display the thickness value together with A and B-Scan displays, providing users with the ability to accurately assess a wide range of materials.

The auto find feature locates the detection point(s) and adjusts the display settings to bring the waveform into view.

The high speed scan feature speeds up the inspection process by taking 32 measurements per second. Remove the transducer from the test material and display the minimum measurement scanned.

Visual and audible alarm with high and low limit settings for specific application tolerances.

For a full range of transducers, please refer to the Single Element Transducers data sheet.

PG70ABDL Display Modes Explained

Material Thickness Digits Display: The standard display on all models, this displays the numerical thickness value in either millimetres (MM)or inches (IN).

Scan Bar Display: A linear graphic display which allows users to graphically monitor changes in thickness readings. As the scale range can be adjusted by the user, this display is ideal for observing tiny variations in material thicknesses.

B-Scan Display: A time based cross sectional 2D block view of the thickness provides a graphical view of the material thickness - ideal for relative depth analysis.

A-Scan Display; Full Wave (RF): The A-Scan display shows the sine wave created by the reflected sound, or oscillation, from the material being measured. In RF mode the full wave form is displayed.

A-Scan Display; Rectified (+ or -): Users can select to view either the positive or the negative cycle of the full waveform (RF). This rectified(RECT) display shows the amplitude of the echo versus the transit time.

Model & Part Number	PG70ABDL
Display Mode: **Material thickness digits display** **B-Scan cross sectional display** **Combined B-Scan and digits display** **Scan bar display** **A-Scan display**	• • • • + Rectified, - Rectified, Full Waveform (RF)
Measurement Mode¹	PE, IE & EE (ThruPaint™)
Measurement Rate: **Manual** **Scan mode** **Scan bar display**	4 readings per second 32 readings per second 6 readings per second
Measuring Range²	PE (contact) on steel: 1.000 - 25.4mm (0.040 - 1.000 inch) PE (contact) on plastic: from 0.254mm (0.010 inches) IE on steel: 1.27 - 25.4mm (0.050 - 1.000 inches) IE on plastic: from 0.127mm (0.005 inches) EE (contact) on steel: 2.54 - 76.20mm (0.100 - 3.000 inches) - ThruPaint™ EE on steel: 0.15 - 12.70mm (0.006 - 0.500 inches)
Measurement Accuracy²	± 1% or ± 0.02mm whichever is the greater
Measurement Resolution	user selectable: 0.01mm / 0.001mm (0.001 / 0.0001 inches)
Velocity Calibration Range	1250 - 10,000m/s (0.0492 - 0.3936in/ms)
Additional Features: **High speed scan mode** **Differential mode** **Limit alarm mode** **Selectable resolution**	• • • •
B-Scan display speed	15 seconds per screen
Calibration setups	16 factory & 48 user-definable setups transferrable to and from a PC archive
Gates	PE: 1 gate; IE, Plastic & EE: 1 gate with hold off Adjustable threshold
Pulser Type	square wave pulser with adjustable pulse width (spike, thin, wide)
Gain	manual or automatic gain control (AGC) with 40dB range (depending on mode selected)
Timing	40MHz with ultra low power 8 bit digitizer
Data Logging	12,000 readings with waveforms grid logging Alpha Numeric batch identification OBSTRUCT indicates inaccessible locations
Calibration Options	single, two point, velocity & material type
Transducer Probe Type	single element with delay tip, pencil with delay tip & contact probes
Transducer Frequency Range	1 - 20MHz
Transducer Recognition	manual - selectable from a list
V-path / dual path error correction	automatic
Probe Zero	manual (via integrated probe disk)
Display	1/8 VGA (grayscale), 62 x 45.7mm (2.4 x 1.8 inches) viewable area
Units (selectable)	mm or inches
LED Backlight	on / off / auto
Repeatability / Stability Indicator	•
Battery Type	3 x AA alkaline
Battery Life (approximate)	150 hours
Low Battery Indicator	•
Battery Save Mode	auto
Operating Temperature	-10 to 60ºC (14 to 140ºF)
Size (w x h x d)	63.5 x 165.0 x 31.5mm (2.5 x 6.5 x 1.24 inches)
Weight (including batteries)	383g (13.5oz)
Aluminium case design with gasket sealed end caps, waterproof membrane keypad	•
Transducer Connector Type	LEMO
RS232 Interface	Bi-directional
Packing List	Elcometer NDT PG70ABDL gauge, couplant, carry case, user manual, test certificate, 3 x AA batteries, ElcoMaster® software, transfer cable

¹ PE: Pulse-Echo Mode, EE: Echo-Echo (ThruPaint™) Mode, IE: Interface - Echo Mode
² Measuring range & accuracy depends on material, surface conditions and the transducer selected