

elcometer® 207 and 207DL **Precision Ultrasonic Thickness Gauges**



The Elcometer 207 series of precision ultrasonic thickness gauges are designed to provide accurate measurements on thin materials. Using the latest transducer designs - the single element delay tip transducer - the Elcometer 207 gauges will measure thin materials in "Echo-to-Echo Mode" and then automatically switch to "Interface Echo Mode" when measuring thicker materials and plastics.

The measurement mode can be pre-selected by the user or if set to auto mode, the gauge will automatically switch between the two modes.

Furthermore, the Elcometer 207's Echo-to-Echo Mode offers the user the ability to measure the materials' thickness **WITHOUT removing the paint or coating.**

NEW FEATURE

All Elcometer 207's and 207DL's now have a new operating mode, the PLAS* Mode. This mode has been specifically designed to provide accurate readings when measuring thin plastics. To use this mode, a special Graphite Delay Line is required which must be ordered separately, Part Number T92016871.

- Two calibration options - Speed of Sound, Calibration to a Known Thickness.
- Backlight display on both versions.
- Data output available on both versions.
- 1000 reading memory in up to 10 batches (Elcometer 207DL only)
- EDTS+ Excel Link supplied free of charge with the Elcometer 207DL.

Each unit is supplied complete with 15MHz, 6mm (1/4") microdot right angle transducer.

Technical Specifications

| | Elcometer 207 | Elcometer 207DL |
|-------------------------------|----------------------|------------------------|
| Interface-to-Echo Mode | ● | ● |
| Echo-to-Echo Mode | ● | ● |
| High speed scan Mode | ● | ● |
| Differential Mode | ● | ● |
| Alarm Mode | ● | ● |
| PLAS* Mode | ● | ● |
| Data Output | ● | ● |
| Data-logging | | ● |
| EDTS+ Excel Link | ○ | ● |
| EDCS+ Software | ○ | ○ |

● = Included ○ = Optional

The Elcometer 200 Series has a range of features to meet your needs, which include:

Interface-to-Echo Mode: In interface-to-echo mode, the gauge can take readings on thicker plastics and other materials between 0.15mm and 25.4mm

Echo-to-Echo Mode: Measurements can be taken on materials as thin as 0.15mm. In echo-to-echo mode, the user can take measurements on pre-coated materials without having to remove the coating prior to measurement ie. the gauge ignores the coating thickness.



High Speed Scan Mode: Identifies the minimum thickness point over a large area by moving the transducer over the surface. While the transducer is in contact with the material being measured the smallest value is held in memory and displayed when scanning is complete.

Differential Mode: Displays the positive or negative difference between a pre-set nominal (target) thickness value and the actual measured value.

Alarm Mode: Allows the user to set a target so that an audible and visual alarm operates when taking measurements. If the measurement falls below a pre-set nominal (target) value a red LED will light and the bleeper sounds. A green LED will light to indicate an acceptable thickness.

PLAS* Mode: Specifically for use when measuring thin plastics. Please note that to use this mode, a special Graphite Delay Line must be purchased, Part Number T92016871.

Data Output: Allows the user to send data direct to a printer or PC. Data-logging: A storage capacity of 1000 measurements – 10 files consisting of 100 sequential storage locations. Allows the user to send data direct to a printer or PC.

EDTS+ Excel Link (Elcometer Data Transfer System): PC data transfer utility including generator of ASCII files and "data drop" add in for Microsoft Excel™ spreadsheets.

EDCS+ (Elcometer Data Collection System): Stand alone data management program with advance facilities for archiving, reporting, analysis and data export.

Specifications

| | |
|----------------------------------|---|
| Maximum Measurement Range | 0.15-25.4mm steel |
| Velocity Range | 1250 - 10000m/s |
| Accuracy | +/-0.002mm - depends on material and conditions |
| Resolution | +/-0.002mm |
| Units | millimetres and inches |
| Operating Temperature | -30 to 50°C |
| Keypad type | Sealed membrane |
| Display | 4½ Digit Liquid Crystal Display with Backlight |
| Transducer | Each unit is supplied with 15MHz, 6mm microdot right angle transducer |
| Power | 2 x AA 1.5V Alkaline or 1.2V NiCad cell |
| Weight | 295g |
| Size | 63.5 x 114.3 x 31.5mm |

Part Numbers

| | |
|--------------------|---|
| C207---1 | Elcometer 207 Precision Ultrasonic Thickness Gauge (complete with 15MHz 1/4" Microdot Transducer) |
| C207DL----1 | Elcometer 207 Precision Ultrasonic Thickness Gauge (complete with 15MHz 1/4" Microdot Transducer) |
| T92016871 | Elcometer 207 & 207DL Graphic Delay Line (Required to use the gauge in PLAS Mode, for measuring thin plastics) |

Shipping List :

Elcometer 207 : Elcometer 207, Ultrasonic Couplant, 15MHz ¼" Microdot Transducer, 2 Delay Lines, Carry Case, Batteries and Instruction Book

Elcometer 207DL : Elcometer 207DL, Ultrasonic Couplant, 15MHz ¼" Microdot Transducer, 2 Delay Lines, EDTS+ Excel Link Software, Data Transfer Cable, Carry Case, Batteries and Instruction Book

