



### HANDHELD FLAW DETECTOR

The new Panametrics-NDT™ EPOCH LT is the lightest, thinnest flaw detector you've ever seen. This is a handheld digital flaw detector that is just 1.5 inch (38 mm) thick. Packed in a 2.35 lbs (1 kg) package you get a fast display update rate at a minimum 60 Hz, automated transducer calibration, a numeric data logger, and many other measurement features! The EPOCH LT is the perfect solution when you need to perform quick, basic flaw detection in difficult field conditions or demanding production environments.

### THE HEAVY-DUTY LIGHTWEIGHT

Although small in size, the EPOCH LT offers many of the performance features you'd normally expect to find in bulkier flaw detectors. In addition to its fast 60 Hz update rate, the EPOCH LT has a Display Freeze Mode that holds waveform

soundpath data, Peak Memory™ that simultaneously displays live waveform and peak envelope of A-scan, RF display mode, selectable threshold positive/negative or minimum depth Alarm Modes, and Auto Transducer Calibration that calibrates for transducer zero offset and/or material velocity.

An on-board numeric datalogger is simple to use and can store up to 100 calibrations / 2000 thickness measurements. There is an optional Expanded Memory feature that allows storage of 500 calibrations / 10000 thickness measurements. The EPOCH LT datalogger is compatible with files from the other EPOCH 4 series instruments and the GageView™ Interface Program.

### FEATURES

- Light, ergonomically designed (2.35 lbs./1.0 kg)
- Fast, minimum 60 Hz electronics update rate
- High-power NiMH battery
- Large, bright, high-resolution LCD with full/split screen views
- Automated transducer calibration
- Display Freeze holds waveform and soundpath data
- Soundpath data viewable in inches, millimeters, or microseconds
- Peak Memory feature
- RF display mode
- Alarms, threshold positive/negative, or minimum depth
- Numeric data logger

### SOFTWARE OPTIONS

The EPOCH LT's versatility is further enhanced by several application-specific software options that can be remotely activated after you have acquired the unit. No need to return the unit to the factory!

- DAC (Distance Amplitude Correction)
- TVG (Time Varied Gain)
- Expanded Memory
- Low PRF
- Echo-to-Echo thickness measurement
- Extended range

# EPOCH LT SPECIFICATIONS\*

**Liquid Crystal Display:** 320 pixels (W) X 240 pixels (H)

**Display Update Rate:** Minimum 60 Hz

**Sensitivity:** 100dB Max and Reference level sensitivity feature with 6 dB or 0.1 dB selectable resolution

**Auto Transducer Calibration:** Automated calibration of transducer Zero Offset and/or Material Velocity

**Reject:** 0% to 80% of full scale in 1% increments

**Units:** English, Metric, or Microseconds

**Material Velocity:** 0.025 to 0.6000 in/ $\mu$ sec (635 to 15240 m/S)

**Range:**

- Standard 0.16 inch to 200 inch (4 mm to 5,000 mm)
- Optional 0.038 inch to 400 inch (1 mm to 10,000 mm)

**Refracted Angle:** Fixed settings of 0°, 30°, 45°, 60°, 70°, or variable from 10° to 85° in 0.1° resolution

**Peak Memory:** Simultaneous display of live A-scan at 60Hz update rate and peak envelope of A-scan display

**Pulsar Type:** negative spike excitation

**Pulse Energy:** Low (100 V), Medium (200 V), High(300 V), and Max(400 V)

**Damping:** 50, 63, 150, and 400 Ohms

**Rectification:** Full Wave, Half Wave Positive or Negative, and unrectified RF settings

**Analog Bandwidth:** 0.3 MHz to 20 MHz at -3 dB

**Test Modes:** Pulse Echo, Dual, or Through-Transmission

**Alarms:** Selectable threshold positive/negative or minimum depth modes

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

**Storage Temperature:** -40°C to 70°C (-40°F to 158°F) depending on battery and display

**Power Requirements:** AC Mains: 100-120 VAC, 200-240 VAC, 50-60 Hz

**Battery:** Internal Rechargeable NiMH battery pack rated at 6 V at 3000mAh

**Battery Operating Time:** 8 hours nominal. 2 hours typical recharge time

**Transducer Cable Connectors:** LEMO® 00 connectors

**Keypad:** English or International symbols

**Languages:** Available in keypad selectable languages: English, French, German, Spanish, Italian, Russian, Japanese, and user-defined custom languages

**USB High Speed Communications Port**

**Dimensions:** 9.375"H x 5.45"W x 1.5"T  
238 mm x 138 mm x 38 mm

**Weight:** 2.35 lbs. (1.0 kg) with battery

**PC Requirements:** Compatible with Microsoft® Windows® XP® and Microsoft Windows 2000®

**Warranty:** One year warranty, battery not included. Optional second year warranty available.

## NUMERIC DATA LOGGER

- Stores up to 100 calibrations and 2000 thickness measurements.
- Optional Extended memory stores up to 500 calibrations and 10000 thickness measurements (PN: EPLT/MEM)

## STANDARD INCLUSIONS

EPOCH LT, Microprocessor-Based Ultrasonic Flaw Detector with numeric data logger includes:

- EP4/MCA Mini charger adapter
- EPLT/BAT Nickel metal hydride rechargeable battery
- EPLT/CAL-NIST NIST calibration certificate
- EPLT/MAN Instruction manual
- 36DLP-CC Transport case

## OPTIONAL ACCESSORIES

EP4/SC Shipping hard shell case

PLUS/RPC Rubber protective carrying case

EPLT/DP Display protectors (LCD)

GageView™ Interface Program including USB cable (PN: EP4P/C-USB-6)

## SOFTWARE OPTIONS:

**DAC (Distance Amplitude Correction):** Calculates signal amplitude as a percentage or dB difference of the DAC curve level (ASME, ASME-3 or JIS). Same size reflectors peak along the curve independent of their location. An alarm can be activated when a gated signal breaks the curve. (PN: EPLT/DAC)

**TVG (Time Varied Gain) with 40dB Dynamic Range:** Corrects for distance/amplitude variations due to material attenuation and beam spreading. Reference echoes are brought to a standard full screen level of 80%. (PN:EPLT/TVG)

**Low PRF (30Hz):** Reduces or eliminates "wrap-around" noise by setting the PRF to a fixed 30 Hz. This feature is often necessary when inspecting materials that are highly attenuating or have long sound paths. (PN: EPLT/LPRF)

**Echo-to-Echo Thickness:** Displays the true metal thickness and ignores the thickness of the coating layer. There is no need to remove the coating. (PN: EPLT/ECHO)

**Extended Range:** Extends Standard Range specifications: 0.038 to 400 inch (1 to 10,000 mm). (PN:EPLT/RANGE)



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