

## Physical

### SIZE:

Width (2.5in./63.5mm.)

Height (6.5in./165mm.)

Depth (1.24in./31.5mm.)

Weight: 13.5 ounces (with batteries)

### DISPLAY:

Membrane switchpad with twelve tactile keys

Operating Temperature:

14°F to 140°F (-10°C to 60°C)

### CASE:

Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed)

### DATA OUTPUT:

Bi-directional RS232 serial port.

Windows® PC interface software

### DISPLAY:

1/8in. VGA grayscale display

(240 pixels x 160 pixels)

Viewable area 2.4in. x 1.8in.

(62mm. x 45.7mm.)

EL backlit (on/off/auto)

## Ultrasonic Specifications

### MEASUREMENT MODES:

Pulse-Echo (standard)

Pulse-Echo w/Gate (fine adjust)

### PULSER:

Square wave pulser with adjustable pulse width (spike, thin, wide)

### RECEIVER:

Manual or Auto Set gain control

with 40dB range

### TIMING:

10-bit 250 MHz digitizer

Warranty

2 year limited

## Power Source

Three 1.5V alkaline or 1.2V NiCad AA cells

Typically operates for 150 hours on alkaline

and 100 hours on NiCad (charger not included)

Auto power off if idle for 5 min

Battery status icon

## Measuring

### RANGE:

From 1in. to 48in.

(2.54mm. to 122mm.) bolts

Time—Nanoseconds

Elongation—Change in length  
(inches/millimeters)

Load—Force load applied (pounds kPSI or megapascals MPa)

Stress—Force for unit area stress applied  
(inches per inch or millimeters per millimeter)

### RESOLUTION:

+/- 0.00001in. (0.0001mm.)

Velocity Range: 0.0492 to .3937 in/ms

(1250 to 9,999 meters/sec)

Fixed, Single, and Two-point

zero calibration options

Select bolt material types from a pre-set or

custom list

### UNITS:

English & Metric / Fahrenheit & Celsius

## Display

A-Scan—Rectified +/- (half wave view), or RF (full waveform view) Large Digits—Display and toggle between nanoseconds, elongation,

load, stress, and strain

### DIGIT HEIGHT:

0.400 in. (10mm.)

Limits Bar (alarm limits)— Set Hi & Lo alarm limits for displaying an acceptable tolerance range

Repeatability Bar Graph—Bar graph indicates stability of measurement

Data Logger (Internal)

Total of 8,000 readings in multiple bolt groups.

Stores both waveform views, nanoseconds, elongation, load, stress and strain for each reading

### MEMORY:

16 megabit non-volatile ram

## Transducer

### TRANSDUCER TYPES:

Single element (1 MHz to 10 MHz

& 1/8in. to 1in. diameters)

Locking quick disconnect

"00" LEMO connectors

Standard 10 foot cable

Custom transducers available for special applications

Temperature probe for automatic temperature compensation

## Features

### SETUPS:

64 custom user defined setups.

Factory setups can also be edited by the user

### GATE:

Gate used to fine adjust where the detection point occurs

### ALARM LIMITS:

Set Hi and Lo tolerances with audible beeper,

viewable scan bar, and visual LEDs

### AUTO SET:

Locates the detection signal, optimizes the gain setting, and adjusts the overall display to show the waveform and detection point automatically

### FIELD CALIBRATION:

Vector & linear regression

## Certification

Factory calibration traceable to national standards.

