

# DAKOTA ULTRASONICS

## The PX Series

**THE PX SERIES** of Precision Thickness Gauges utilize state-of-the-art digital technology to produce fast and accurate readings. The gauges are designed with the user in mind. They are **PACKAGED** in an all aluminum sealed case making it resistant to the working environment. The gauges are simple to operate and are loaded with the **FEATURES** you have requested: Alarm Mode, Differential Mode, Internal Data-Logging and RS-232 data output port to interface with a computer or other data acquisition system.

The gauges have a **MEASURING RANGE** from 0.0060 to 1.0000 inch, (0.15 to 25.40 mm). Using a single element delay tip transducer, the gauges will measure thin materials in **ECHO-TO-ECHO MODE** and automatically switch to **INTERFACE-ECHO MODE** when measuring thicker materials and plastics.

**THE PX-7'S** echo-to-echo mode offers the user the ability to measure the thickness of materials without removing the paint or the coating.

S O U N D S O L U T I O N S

# THE PX SERIES PRECISION THICKNESS GAUGES

**DAKOTA ULTRASONICS** PX Series has arrived. The variety of features offered in the **PX-7** and **PX-7DL** allow the user to select a quality tool that will meet or exceed their specific application needs. In the Echo-to-Echo Mode you have the ability to measure the thickness of materials without removing the paint or the coating. Our 5 year limited warranty indicates how we feel about the reliability and durability of the **PX SERIES**.

## S P E C I F I C A T I O N S

### Physical

**Weight:**

10 ounces (with batteries).

**Size:**

2.5 W x 4.5 H x 1.24 D inches  
(63.5 W x 114.3 H x 31.5 D mm).

**Operating Temperature:**

-20° to 120°F (-30° to 50°C).

**Case:**

Extruded aluminum body with nickel-plated aluminum end caps. Sealed connectors and end caps.

### Keypad

Sealed membrane that is resistant to both water and petroleum products.

9 tactile-feedback keys.

### Transducer

Single element with delay tip.

10 to 22 MHz frequency range.

Locking quick disconnect LEMO connector.

4 foot cable (1.2 meters).

Custom transducers available for special applications.

### Warranty

**5 year limited.**



### Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells.

Typically operates for 150 hours with alkaline and 100 hours with NiCad.

Display flashes when battery is low. Unit turns off automatically when battery is too low to operate reliably.

### Display

Multi-function 4.5 digit liquid crystal display with 0.500 inch numerals, backlit for use in poor light conditions.

Backlight is selectable on / off / auto (illuminates only when taking a measurement).

Measurements displayed in inches, inches/microsecond, millimeters, and meters/second.

Bar graph indicates stability of reading.

### Certification

Factory calibration traceable to national standards.

### Internal Data Logger (PX-7DL only)

Automatic Data Logging System 1000 reading capacity, (10 files of 100 readings each).

OBST indicates no reading.

Complete with data acquisition software and cable.

### Measuring

**Range:**

Measures from 0.0060 to 1.0000 inch (0.15 to 25.40 millimeters). Switch to select English or Metric units.

**Resolution:**

0.0001 inch (0.001 millimeter)

**Velocity Range:**

0.0492 to .3937 in./ $\mu$ s.  
(1250 to 10,000 meters/second).

### Measuring Modes

**Interface to Echo, Echo-to-Echo** (through paint) and **Auto-Switchable**.

Four readings per second for single point measurements or 8 per second in **Scan Mode**—captures the minimum thickness.

Single point calibration.

### Features

**Differential Mode:**

Enter acceptable thickness value, unit will display +/- the difference from the value entered.

**Alarm Mode:**

Enter a minimum acceptable thickness value. If measurement falls outside Hi/Lo limits, red LED will illuminate and sounds beeper. If measurement is between Hi/Lo limits, green LED will illuminate.

**Data Output:**

RS-232 output sends data to a serial printer, a computer or other external storage device.

A S O N A T E S T P L C G R O U P C O M P A N Y

Distributed by:



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