

The I-Scan® Handheld System

Tactile Pressure and Force Measurement System

Handheld Pressure Mapping System

When small system size and portability are important in collecting pressure data, *I-Scan* Handheld is ideal for capturing contact pressure distribution. One of the many ultra-thin Tekscan array sensors is inserted between two surfaces. Scanning and interface electronics in the handle read the sensor and send data through a USB connection to the Pocket PC (PDA). A vivid, real-time, 2-D image, with color indicating different pressure levels, is displayed. Snapshot recording is controlled either by touch screen or switches on the handle.



The small size, weight, and battery power of *I-Scan* Handheld are convenient for field use. Applications include:

- -Adjusting nip rollers in converting machines
- -Sealing jaws and packaging machines
- -Adjusting automotive door and window seal pressures
- -And many, many more.

Two levels of software are available for *I-Scan* Handheld. Basic software is a subset feature of classic *I-Scan* (PC based), providing relative measurements. The Basic software is also intended for organizations that have classic *I-Scan* operating on a PC and desire additional systems for field use or more portability. With classic *I-Scan* operating on a PC with an Evolution handle, calibration and equilibration data can be downloaded to a Basic Handheld system on a PDA. After data is captured in the field and stored on the PDA, it can be displayed using classic *I-Scan* on the PC for more thorough analysis. The Enhanced software adds calibration and equilibration capability and other *I-Scan* features making *I-Scan* Handheld Enhanced a powerful stand-alone product.

Applications:

- Field service
- Test and measurement
- Machine and assembly line set-up:
 - -Pinch rollers
 - -Sealing jaws
 - -Screen printing squeegees
 - -Packaging
- Data collection and validation

Industries:

Automobile, Semiconductor, Pharmaceutical, Ergonomics, Packaging, Paper, Printing, Healthcare, Universities, and many more...

Sensors:

- Compatible with Tekscan's single-handle, thin-film, matrix-based array sensors
- Sensors ordered separately

Available Options:

- Data logging records dynamic movies capturing changes over time, displays first frame of recorded movie. (Classic *I-Scan* on a PC required to view dynamic movie).
- Software license for off-line analysis of handheld data on a PC - displays snapshots, provides graphical analysis and provides export of ASCII data
- Additional maps for operation of additional sensor patterns

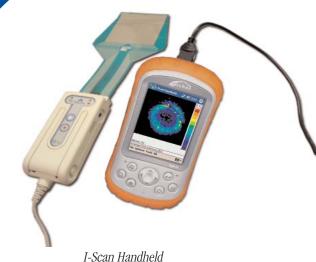
Specifications and Features

Software Features of *I-Scan* Handheld Basic:

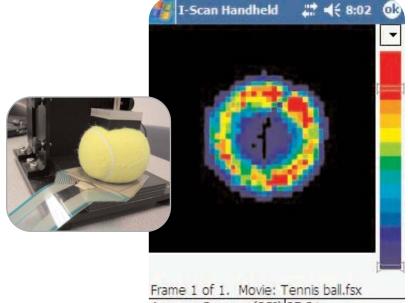
- 2-D display of real-time sensor output
- Displays snapshot of pressure distribution
- Saves snapshot with either automatic file naming or user entered file name
- Screen image saved as *.bmp for use in other programs
- Eight adjustable sensitivity levels to raise or lower the pressure range of the sensor
- Text comments are saved with data files to document experimental conditions
- Show pressure average digital output on sensor, and count of sensels at each pressure level
- Eight bit, 256 level pressure resolution
- Adjustable color key, averaging, mirroring and rotating sensor image to provide desired view
- And much, much more!

Additional Features in Handheld Enhanced:

- Stand-alone calibration (linear or power law)
- Equilibration improves uniformity of sensor response
- Tare offsets initial base load on sensor from dynamic measured load
- Show loaded contact area & total force on sensor
- Center of force on display



I-Scan Handheld System



Average Pressure(PSI) 27.21

2-D view of a tennis ball on calibrated 5051 sensor

Call Today for a Demonstration!

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