

# DermaScan® USB technical specs and features 2012.

(Features of particular importance in bold)

## Hardware:

Fully integrated lunchbox-sized design  
One main unit for all probe frequencies  
Laptop controlled via USB connection  
Optional cradle with probe holder

**200 MHz 12 bit A/D conversion**

**High system bandwidth, up to 100 MHz**

**Near real-time scanning up to 8 frames/sec. (scan time 0.125 s)**

**Automatic cineloop function captures last 100 images**

Split screen function, four simultaneous images

20 MHz B-scanning at 60 x 150 micron resolution, 13 mm penetration (standard)

20 MHz B-scanning at 60 x 260 micron resolution, 23 mm penetration (optional)

50 MHz B-scanning at 30 x 60 micron resolution, 3mm penetration (optional)

**Swept gain, full operator adjustment of both profile and level, amplification up to 42 dB**

Built-in Ethernet and USB I/O connectivity

Unlimited HDD storage capacity with ext. HDD

Full color scale editor

RF-signal (optional)

**Upgradeable to 3D scanning and 3D visualization**

## Probes:

**Closed water chamber (no spillage)**

12.1 mm scanlength at 20 MHz (2D)

6 mm scanlength at 50 MHz (2D)

22.4 x 22.4 mm scan area at 20 MHz (3D)

**Counterbalanced movement, no vibration**

**Probes are precision calibrated acc. to focal distance**

## Software:

WINDOWS 7 operating system

DSCANV3 application software w. full-featured data analysis (ADVANCED config.)

Direct printing to any WINDOWS supported printer

Automatic timestamping of recordings

**Autostore function**

Patient data file and scan position marker

A/B-mode scan representation in 2D

Image formats: TIFF, JPG, DSC (internal)

**A, B, C mode, surface and volume reconstruction in 3D, instant 3D visualization (3D option)**

**Export of measurements to spreadsheets**

Zoom in/out and scroll function on live and “frozen” images

**Automatic save/retrieve of scan settings**

**Extensive Measurement functions (ADVANCED config. only):**

A-scan horizontal - current and average distance (+/- 1%)

A-scan vertical - current and average distance (+/- 1%)

Arbitrary distance (+/- 1%)

B-scan edge detection

B-scan min, max, average distance (+/- 1%)

B-scan line length calculation (+/- 1%)

**B-scan intensity segmentation and area calculation (+/- 1%)**

**Region Of Interest calculation – automatic or manual (+/- 1%)**

**Volume and surface area (3D)**

*(Specifications may change without further notice)*