

**Mobile:** At 7.7 lbs. the TITAN system can be taken to the patient wherever they are

**Reliable:** ASIC technology delivers highly stable ultrasound you can count on

**Durable:** The unique design of the TITAN system enables it to withstand the rigors of intense environments

**Easy to Use:** The intuitive interface makes the TITAN system easy to integrate into any practice



## SYSTEM SPECIFICATIONS

### System Specifications

- System weight: 7.7 lbs.
- System dimensions: 11.9" L x 10.9" W x 3" H
- Integrated fully digital 8.4" (diagonal) TFT color Liquid Crystal Display

### Mobile Docking System

- Mobile Docking System dimensions: 31.9" L x 22.6" W x adjustable height 33.2" to 45.1"
- Storage available for fully integrated printer and/or VCR storage area
- Optional connector for 3 transducers – changes by simple electronic switching
- Optional 11.8" (diagonal) monitor

### Imaging Modes

- 2D
- Split screen
- Zoom
- Color Power Doppler
- M-Mode
  - 3 sweep speeds
  - 1/2 1/2, 1/3 2/3 or full screen options
- Pulsed Wave (PW) Doppler
- Continuous Wave (CW) Doppler
- Color Velocity
- Duplex imaging
  - 3 sweep speeds
  - 1/2 1/2, 1/3 2/3 or full screen options
- Tissue Harmonic Imaging (THI)

### Transducers

All transducers are lightweight with rapid, pinless connectors and feature a user selectable menu to adjust frequency settings to suit the patients size. Settings are Penetration, General and Resolution imaging.

- C60/5-2MHz broadband curved array for general purpose, abdominal and obstetric imaging. 2D, CPD, DCPD, PW Doppler.
- ICT/8-5MHz broadband intracavitary transducer for obstetric and gynecologic imaging. 2D, velocity color, PW and CW Doppler.
- C11/8-5MHz broadband tightly curved array for neonatal and pediatric imaging. Applications include general imaging, abdominal, cardiac and neonatal heads. 2D, CPD, velocity color, PW and CW Doppler.
- C15/4-2MHz broadband tightly curved array. Applications include adult cardiology\* general imaging, abdominal. 2D, CPD, velocity color, PW and CW Doppler.
- L38/10-5MHz broadband linear array. Applications include small parts, breast, vascular, musculoskeletal & superficial imaging. 2D, CPD, velocity color and PW Doppler.
- HST/10-5MHz broadband linear array. Applications include intraoperative vascular & superficial imaging. 2D, CPD, DCPD, PW Doppler.
- C8/8-5MHz broadband intracavitary transducer for prostate imaging. Biopsy guide available. 2D, CPD, DCPD, PW Doppler.

### Remappable Controls

- Softkeys to drive advanced features.
- Delta key: user selectable functions can be assigned to the delta key for increased ease of use.

\*CW, velocity color and auto-trace available on later release.

### System Parameters

- System dynamic range: Up to 155dB
- Frame rates up to 150Hz maximum acquisition, 60Hz internal video display.

### Image Storage and Cine

- Storage: High capacity using flash card. 64MB card stores 128 images (approx).
- Cine: Review of up to 220 frame-by-frame images.
- Connect directly to a PC with SiteLink Image Manager software using a USB cable from the system. Allows transfers of high resolution bitmap images. Software allows batch compression to JPG on PC.
- Image transfer can be active while live scanning on TITAN.

### Clinical Analysis Package

- OB Calculation Package – Obstetric package includes fetal biometry measurements via user selectable authors.
- Vascular Calculation Package – Vascular package includes Lt/Rt CCA, ICA, ECA, ICA/CCA Ratio, user defined ratio, angle correction, volume flow.
- Volume calculations via diameters.

### Measurement Tools

- 2D
  - Distance calipers – two sets
  - Ellipse for area and circumference measurements
- M-mode
  - Distance and time caliper set
  - Heart rate
- Doppler
  - Velocity caliper – two sets provide peak velocity RI & S/D ratio.
- Volume Flow

### Power

- Operates via battery or AC power – from 1.5 up to 4 hours on fully charged battery, new battery life depends on the active functions used and keystrokes.
- Battery: Rechargeable lithium ion
- AC: Via universal power adapter, 100-240 VAC, 50-60 Hz

### Display Annotation

- Text and pictograms – User selectable application specific text via function keys.

### Peripheral Connections

- Composite video output (NTSC/PAL) to video cassette recorder, video printer or external monitor.
- Connect to a PC via USB to download high resolution bitmap images.
- S-video output
- Ethernet output
- VGA output

### Connectivity

- DICOM print and storage class software available
- DICOM worklist

 SonoSite **TITAN**™







**The SonoSite TITAN** is a hand-carried mobile ultrasound system uniquely combining high performance and usability in a lightweight rugged package. The TITAN system offers the high-resolution image quality, features and functionality of a cart-based system while maintaining the flexibility and speed of a grab-and-go solution. The system was designed to be the most intuitive and easy to use ultrasound system available today. The intuitive interface combined with the application-specific presets, enables customers to focus on the patient, not on the system controls. The complete package ensures a very quick path to great images when and where they are needed.

## Clinical Performance

**Technology:** The TITAN is driven by SonoSite's proprietary application-specific integrated circuitry (ASIC) technology. This chip-based system enables us to pack sophisticated digital imaging technology into a highly portable solution without sacrificing quality or performance.

**Display:** The TITAN features crisp, clear images on a 8.4" (diagonal) digital LCD screen.

**Advanced Ultrasound Capabilities:** With features such as continuous and pulsed wave Doppler, Tissue Harmonic Imaging (THI), velocity based color flow Doppler, color power Doppler, and unlimited storage capacity on flash memory cards and SVHS recording, the TITAN has complete functionality to provide full diagnostic capabilities at the point of care.

### Transducers:

SonoSite transducers offer unrivalled performance in the ultrasound industry, with 0.5% downtime per year on average. We are so confident in our quality



that SonoSite covers transducers in service contracts. Our unique advanced hybrid architectures performance and durability has been proven with thousands of users around the globe. The TITAN uses the same base set of high-performance broadband transducers as the SonoSite® 180PLUS ultrasound system, ranging from 2-10 MHz. Most existing SonoSite transducers can be upgraded for use on a TITAN system through a simple software upgrade.

## Flexibility

**Mobility:** Lightweight (only 7.7 lbs.), compact and with AC or battery power,



The TITAN is ideally suited for point of care applications where they are needed.

### Mobile Docking System (MDS):

A fully integrated mobile dock that provides additional stability, features, security, and connectivity. Docking the TITAN in the MDS expands its capabilities and adds flexibility, including space for multiple transducers, printer, VCR, supplies and cables.

### Triple Transducer Connect (TTC):

A unique module with three active connectors that allows users to rapidly switch between transducers, saving time and effort.



The TTC makes the TITAN a total solution for almost any ultrasound environment.

**Mini Dock:** Offers full connectivity in a pocket-sized port replicator attachment.

**11.8" Monitor:** When a second display is needed, SonoSite offers an optional flat screen LCD monitor that can be attached to the hand-carried unit.

## Reliability

**System Stability:** Our proprietary ASIC technology at the heart of the TITAN delivers a system that is highly resistant to failure, produces consistent high quality performance and offers the clinician quick boot-up time (under 12 seconds).

**Durability:** A busy environment particularly where a lot of mobile work is required can be hard on medical equipment. The SonoSite TITAN is built to withstand the rigors of the most demanding environments. All SonoSite systems must pass a 30" drop test onto a concrete surface on all corners. This ruggedness means less downtime and lower maintenance requirements – which translates to substantially lower cost of ownership.



## Future Technology Integration

**Connectivity:** Connect via composite video, S-video, USB, or Ethernet. DICOM solutions are available to link to hospital networks and support individual image management needs



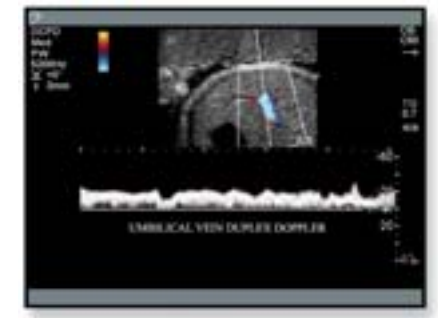
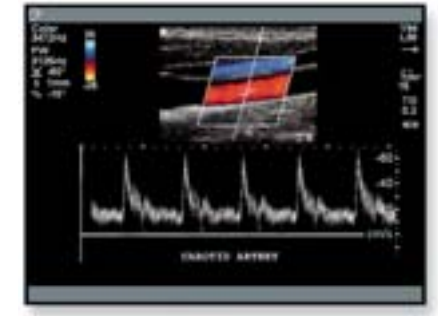
and as connectivity standards change, the external Mini Dock ensures that the TITAN can easily adapt.

**Upgradeability:** With two flash memory card slots, the TITAN is ready for the future. Software upgrades can be performed quickly and inexpensively at the user's site, so the system can grow along with customer needs.

## Education and Training

**Education:** SonoSite partners with third-party educators across multiple applications to provide complete solutions for our customers.

**Training:** SonoSite invests heavily in training to ensure that the TITAN can be seamlessly integrated into any healthcare setting. Our users typically learn the TITAN system quickly and start taking full advantage of its many capabilities.



**SonoSite TITAN™**