



 **MediRay**<sup>TM</sup>  
*Committed to Customer*  
*Committed to future ...*

## UScan D-3000

Color Doppler  
Ultrasound System



In today's clinical environment, you need a machine combined with performance and versatility to help you make more for the patients.

From normal diagnosis and report analysis to video and report record, the patients need more in every stage of their visits than ever before. Emperor Medical makes all the capabilities needed for growing practices to help you expand your clinical applications.

## Superior Image Quality

- Superior B-mode Imaging
- **ePure** Unique Speckle Reduction Technology
- **eSpeed** One Key Optimization
- **eFCI** Frequency Compounding Image
- **eSCI** Spatial Compounding Image
- **eView** Panoramic Imaging
- Self-adaptive Color Artifact Clearance
- Virtual Trapezoidal Imaging
- Auto Trace Calculation PW
- 2D With Harmonic Imaging
- Pulsed-Wave Doppler
- Power Doppler Imaging
- Multi-Beam Former



With the advanced features of UScan D-3000, you could have more confidence to replace your old ultrasound systems and expand your offerings with an additional system, without limit of constrained budget to be more distinguishing in your area.

## Improved Productivity

- One-button Image Optimization
- Menu Optimization
- Comprehensive Clinical Applications
- Patient Information Management System
- Efficient Workflow to Perform Better and Quicker
- Shortcut Keys for Workflow Facilities
- Easy Data Recording
- Diagnostic Report Generated Automatically
- USB Ports
- DICOM 3.0
- DVD-RW

## More Comfortable & Convenient

- Adjustable High-resolution LCD Monitor
- Fully Articulated Arm
- Highly Interactive Control Layout
- The Footrest for Stress Relieving
- Integrated Handle for Easy Moving
- Three Transducer Connectors for Multi-applications





We try to make you feel comfortable in every stage of diagnosing, whether sitting or standing, you can make the relevant controls right at your fingertips to experience ease and simple, stress-free operation.

With the fully articulated arm, you are able to move the monitor to facilitate suitable working postures and reduce repetitive stress injuries.



**A.** Adjustable high-resolution monitor and fully articulated arm afford you exceptional scanning experience with less neck strain and glide the screen into the best position for you.



**B.** Multi-function shortcut keys for clustering 95 percent of your most-used items in the interface, so you can focus on the patient instead of searching for the key.



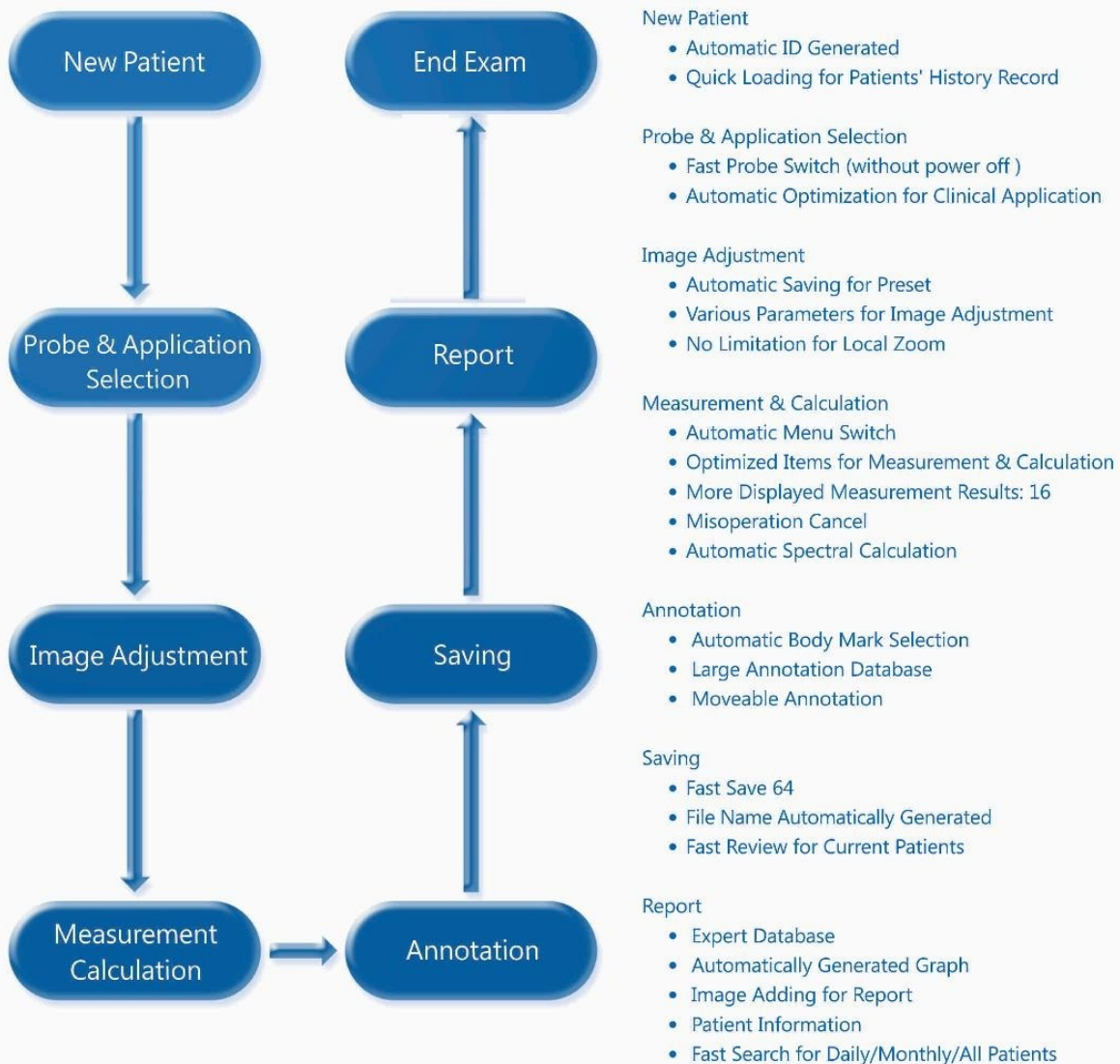
**C.** With three transducer connectors, UScan D-3000 can provide you multiple departments utility and reduce the time of switching between different departments.



**D.** The console keys are right where you want them to be. We put the most frequently used controls at your fingertips and easy for your eyes to help reduce reaching and hyperextension for easy learning and memory.

The UScan D-3000 was designed with optimal workflow to help you focus on your patients. With our intelligent and easy learning user interface, you could learn all the advanced imaging and measurement technologies in a fast way.

In addition, the automatic image optimization technology can help you reduce exam time and minimize keystrokes, freeing you from repetitive tasks.



# Clinical Applications

## Gynecology

### Obstetric

- Early Pregnancy
- Middle-later Pregnancy
- Fetus Cardiology

### Vascular

- Periphery Artery
- Periphery Vein
- Carotid
- Jugular

### Abdomen

- Adult Abdomen
- Adult Liver
- Adult Gallbladder
- Adult Spleen
- Kid Abdomen

### Urology

- Kidney Ureter
- Bladder Prostate

### Cardiology

- Adult Cardiology
- Kid Cardiology

### Small parts

- Mammary Glands
- Thyroid
- Eye ball

### Orthopedics

- Hip Joint
- Meniscus
- Joint Cavity
- Spine

### Transcranial Doppler

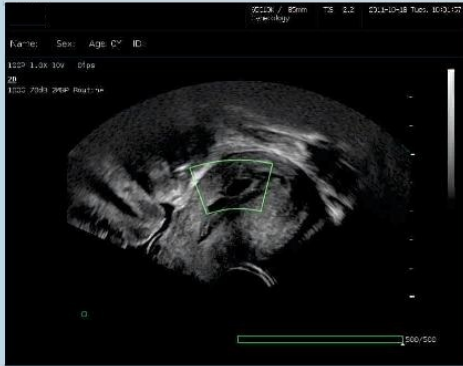
## Abdomen



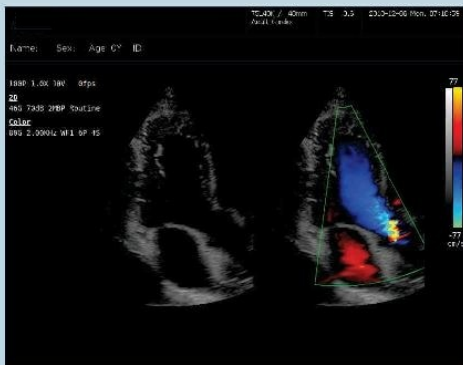
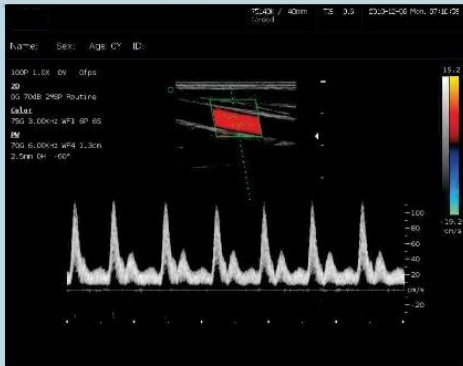
## Obstetric



## Gynecology



## Vascular



## Image Modes

M-mode

B-mode

Anatomic M

CFM (Color Flow Imaging)

PW (Pulsed Wave Doppler)

Duplex for Simultaneous

- B+PW
- B+CFM
- B+PDI
- B+CFM Comparasion
- B+PDI Comparasion
- B+Direction PDI

Triplex Mode

- B+CFM+PW
- B+PDI+PW

Quad Mode

- B+B+B+B
- B/CFM+B/CFM+B/CFM+B/CFM
- B/PDI+B/PDI+B/PDI+B/PDI



# Technical Specifications

## Basic Technical Parameters

Probe Working Frequency	2.0 MHz~12.0 MHz
Display Mode	B, 2B, 4B, M, B+M, CFM, PDI, B+PW, B+CFM+PW, B+PDI+PW
Type of Focusing	Dynamic Focusing Acoustic Lens Focusing Launching Multipoint Focusing
Scanning Technique	Dynamic Apodization Dynamic Aperture Dynamic Frequency Scanning Multi-Acoustic Beam
Pre-processing	Low Noise Preamplifier TGC Filtering Frame Average Line Average
Post Processing	Gamma Correction Histogram Digital Scan Conversion (DSC) Edge Enhancement Noise Rejection Smooth Image Optimization Grey Scale Transformation Pseudo-color Color Persistence etc.
Display Control	Freeze/Unfreeze Left-Right Reverse Up-Down Reverse Polarity Reverse Picture Rotation (90°/180°/270°) Color Reverse Inverse-Frequency Spectrum Pseudo-Color Output Acoustic Power PRF Focus Position Scanning Angle Image Frame Frequency Impulse Duration, Depth Sampling Area Dimension
Control of Transformation and Adjustment on Sound Field	Image Frame Frequency Impulse Duration, Depth Sampling Area Dimension
Gray Scale	256
Color Scale	24
Frame Rate	Max up to 75 f/s
Scanning Area	≥ 300 mm
Density of Scanning Lines	Max 256 line/frame
Monitor	15" LCD Monitor
Video Output	PAL-D, S-video, NTSC, Composite
Digital Scan Converter	1024 x 768 x 8 Bits
Body Mark	123 body marks with probe location

General Measurement	2D/CFM : Distance, Area, Volume (ellipse method), Angle M : Distance, Time, Slope, Heart Rate, Simplified Left Ventricle Function, Complete Left Ventricle Function. PW : Distance, Max Ventricular Gradient, Average Ventricular Gradient, Time, S/D Ration, Blood Flow Rate, Acceleration of Blood Flow, Heart Rate, Pulsate & Drag Index.
Image Memory	Hard Disk for massive image storage, Min. 10,000 images permanent stored
Cine-loop	No Less than 512 frames
Biopsy Character	Optional Biopsy Guide Date, Time, Patient Name, Device Name, User Name etc. User-Defined Annotation Table, Arrowhead and Body Marks
Measurement Software	Software packages of Abdomen, Obstetrics, Gynecology, Urology, Cardiology, Fetal Heart, Orthopedic Surgery and Superficial Parts; directly from diagnostic report based on measurement results
Input Power	200 VA
Continuous Working Time	≥ 8 h
Size	990mm (L) x 690mm (W) x 1200mm (H)
Weight	N.W. : 65.0 kg

## Technical Parameters of Standard Configured Probe

Probe Model No.	3.5CV
Probe Frequency	2.0-6.0 MHz
Probe Type	Electronic convex

## Block Diagram

This equipment is mainly composed of main unit, probe and monitor. Optional probes. Convex probe 3.5CV, Linear Probe 7.5LVS, Micro-Convex Probe 3.5MC and Transvaginal Probe 6.5VMC.

## Application Scope

This equipment is applied to clinics with ultrasound diagnostic facility.

## Inapplicability

This equipment is not applied for the examination of the viscera with air, like lung, stomach, intestines.

When the optional transvaginal probe is applied, patients with below symptoms are forbidden to conduct examination: vaginitis, including trichomonas vaginitis, colpomycolosis, and venereal disease, virgin, vaginal disfiguration, menstrual period, postmenopausal atrophic vagina, vaginal hemorrhage, placenta praevia and so on.

## Mediray Healthcare Pvt. Ltd.

An ISO 13485:2003 Certified Company  
 Regd. Off: 513, Pkt-2, OM Apartment, Sector 14, Dwarka, ND-110075 (INDIA)  
 Corp. Off: Plot No.20, Pocket-4, Sector-23B, Dwarka, New Delhi-110075 (INDIA)  
 Factory: E-179, Trans Delhi Signature City, Sec-A-7, UPSIDC, Loni, Ghaziabad (UP)-201102 (INDIA)  
 web: [www.mediray.in](http://www.mediray.in), E-mail: [info@mediray.in](mailto:info@mediray.in)  
 Contact Nos. + 91 9599565300, 9990778887