

M-Smart50

Full-digital B/W Ultrasound Diagnostic System



An Excellent B/W System

M-Smart50 is an excellent general purpose B/W ultrasound diagnostic system. Based on Mediana's leading digital ultrasound technology, M-Smart50 offers decent 2D and 4D images.

Standard Configuration:

M-Smart50 main unit

15" high definition non-interlaced LCD monitor, special for medical imaging

Three activated transducer connectors

Cine review: $\geq 10,000$ images Cine Memory for 2D Image

One Click Restoration of O/S

System Computer 800GB HDD

DVD-R/W

Six USB ports

DICOM 3.0

Panoramic zoom

Measurement & calculation software packages

SVVR (super volume video recording up to 1 hr)

Electronic convex array transducer: CA3.5MHz/R50 (2.0-6.0MHz)

Electronic linear array transducer: LA7.5MHz/L40 (3.0-10.0MHz)



Options:

Phased array transducer: PA2.5MHz (1.0-5.0MHz)

Electronic endocavity transducer: EV6.5MHz/R10 (4.0-9.0MHz)

Electronic micro-convex array transducer: MC3.5MHz/R20 (2.0-6.0MHz)

4D Package [Volume transducer CLA4.5MHz (2.5-6.5MHz) + 4D software]

Needle-guided brackets

Footswitch

RTDT (real-time dynamic transfer of images and videos)

Technical Specifications:

General Descriptions

Imaging mode:	B B/B B+M M PW
Gray scale:	256
Display:	15" high-resolution non-interlaced monitor, special for medical Imaging, with flexible arm Display matrix: 1680 x 1050
Transducer frequency:	2.0 ~ 12MHz
Transducer connector:	3
Image Dept:	1.5 to 26 cm
Imaging Technology:	Continuous High-precision Digital Beam-former Dynamic Frequency Integration Imaging High-precision Dynamic Receiving Focus Self-adaptive Image Optimization Processing Multi-beam Imaging Self-adaptive Vascular Imaging Self-adaptive Doppler Imaging THI (Tissue Harmonic Imaging)

Image Processing

Pre-processing:	8-segment TGC gross gain dynamic range (up to 200dB) gray map smooth acoustic power adjustment scanning angle selection
Post-processing:	edge enhancement frame correlation line correlation γ-correction contrast brightness etc.



Measurement & Calculation

B-mode:	distance, circumference, area, volume, angle, residual urine volume, histogram, profile
M-mode:	distance, time, velocity, heart rate
D-mode:	doppler blood flow measurement, velocity, acceleration, pressure gradient, time, VI, PI, RI, etc
Software packages:	
GYN	uterus, endometrium, ovary, cervix, ovarian follicle
OB	GS, CRL, LV, BPD, OFD, HC, TAD, LVW, HW, TCD, IOD, OOD, BD, APTD, TTD, AC, APD, FTA, HL, ULNA, FL, FIB, CLAV, etc
Cardiac	M. Simpson, B-EF、M-EF (Pombo、Gibson、Teichholz) , Diameter Function, PV flow, AV-Area, B-LV/Ao、M-LV/Ao, MV Regurg, etc
Urology	volume of prostate, volume of bladder, volume of urine, volume of trans zone, HipJ.Angle (hip joint dislocation in neo-natal and babies)、slice v, etc
Small Parts and Peripheral Vessels	vascular cross-sectional area, heart rate, stroke volume, flow per unit time, Ejection Time, % stenosis, mean velocity of flow, RI, PI, etc.

Others

Peripheral port:	Video output	1	USB port	6
	DICOM3.0	1	VGA port	1
	S-Video port	1	RS232	1
	Print Remote	1		
Power supply:	100V - 240V	50/60HZ		
Net weight:	70Kg			

