Specifications

Scanning methods	Convex / Micro Convex / Linear		
Display mode	B, B/B, B/M, M, PWD, B/PWD, CFM		
B-mode:	Focus method	Transmitting max 3 zone focuses	
		Receiving max 16 points dynamic focus	
	Frequency 3 selectable		
	Tissue Harmonic Imaging on/off ※(depend on applicable probe)		
	Display depth 2~24cm, 1cm/step		
M-mode:	Display Control Up/Down, Right/Left, Angle(only convex probe)		
	Display mode	Moving Bar	
	Sweep speed	4 steps	
PWD mode:	Display mode	Moving Bar	
	Sweep speed	4 steps	
	PRF	1 ~ 16KHz (auto setting)	
CFM mode:	Velocity mode		
	Velocity-Variance mode		
	Power Doppler mode		
	Bi-directional Power Doppler mode		
	Power-Velocity mode		
Imaging Control	GAIN	60~100dB continuously variable	
	STC	6 steps, slide volume	
	Dynamic Range	30~90dB, 5dB/step	
	Frame correlation	8 steps	
	Post Process	8 steps	
	Color Scale Imaging	4 types	
Cine Memory	B-mode	MAX 535 frames	
Scroll Memory	M, PWD-mode	4 page	
Biological Signal	ECG (optional)		
Measurements and Calculations	General	Distance, Area, Circumference, Volume	
	Cardiac	Volume, Velocity, Heart rate, Left ventricle function	
	OB/GYN	Gestation period, Expected delivery Date, Fetal weight	
	Doppler	LV in-flow, RV in-flow, PI, RI, AVA, CO, Tei-index	
Monitor	10.4in TFT Color LCD (800 x 600 dots, SVGA)		
Image Filing	3.5in 640MB MO (JPEG / BMP)		

Auxiliary I/O Terminal

B/W Image output	One BNC connector for external Video Printer (NTSC or PAL)
Color Image output	One S-Video connector for external Color Video Printer or VTR
Serial port	Two USB (USB1.1)
Network	Ethernet (10BASE-T)

General

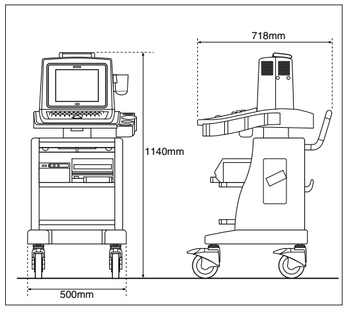
Power	AC 100 ~ 230V ±10%, 50/60 Hz
Power Consumption	Approx. 120VA
External dimensions	380(W) x 222(D) x 370(H) mm
Weight	Approx. 13Kg

Optional Probes

Abdominal, OB/GYN	60R Convex Probe	2.5 / 3.5 / 5.0 MHz	FUT-CD602-5A ※
Pediatric Abdominal	50R Convex Probe	5.0 / 6.5 / 8.0 MHz	FUT-CD505-8A
Adult Cardiology	15R Micro Convex Probe	2.5 / 3.5 / 5.0 MHz	FUT-CD152-5A ※
Pediatric Cardiology	10R Micro Convex Probe	5.0 / 6.5 / 8.0 MHz	FUT-CD105-8A
Superficial Organs	High Freqency Linear Probe	6.0 / 7.5 / 9.0 MHz	FUT-LD386-9A
OB/GYN	Transvaginal Probe	5.0 / 6.0 / 7.0 MHz	FUT-TVD114-7A

(※ available for Tissue Harmonic Imaging)

FUT-CD602-5A FUT-CD505-8A FUT-CD152-5A FUT-CD105-8A FUT-LD386-9A FUT-TVD114-7A



Options

Wagon (System Trolley)	UCW-01
Biological Signal Unit	UF-750XT-BIU
B/W Video Printer	FVP-800
Color Video Printer	SONY UP-21MD/SYN

Biopsy Needle Guide Holders
(Required the disposable needle guide kits)

FUT-PAD10A	(for FUT- CD105-8A probe)
FUT-PAD15A	(for FUT- CD152-5A probe)
FUT-PAD38A	(for FUT- LD386-9A probe)
FUT-PAD50A	(for FUT- CD505-8A probe)
FUT-PAD60A	(for FUT- CD602-5A probe)

Puncture Adaptor

FUT-PVG11A	(for FUT-TVD114-7A probe)

FUKUDA DENSHI reserves the right to change specifications without notice.

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PORTABLE COLOR DOPPLER ULTRASOUND SYSTEM

FFsonic UF-750XT

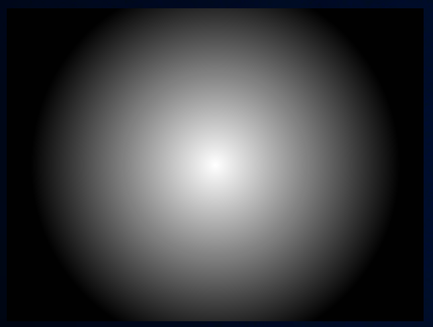
FFsonic tellus UF-750XT

FUKUDA DENSHI

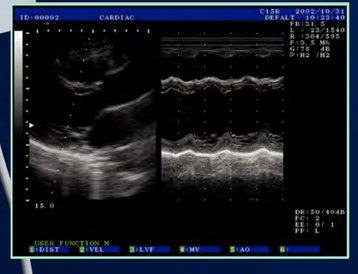
The evolutional, flexible system will surely change the matter-of-fact of diagnosis color flow imaging

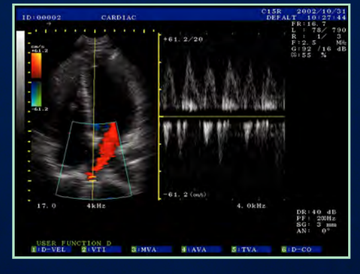
FF sonic UF-750XT tellus

In the progressing evolution of high speed Ultrasound technology, we have created superb image quality through the adoption of programmable digital image processing architecture.
Both additional function and digital filtering, which determines image quality, are available through a simple software upgrade. Fukuda Denshi's original technological revolution makes this possible without the restriction imposed by hardware systems.



Incorporating all fruitful results of the research into high image quality and truly required functions for ultrasonic diagnosis, the UF-750XT "Tellus" not only ensures utmost ease of operation but also provides diagnostic accuracy and efficiency with maximum cost-performance. Thoroughly improved S/N ratio and resolution revealing delicate details in clear contrast are made available through various contrivances and the F-XT technology that digitally backs them realizes the high image quality and excellent function. Adopting a full software architecture, the system can flexibly cope with the needs for digital image filing and networking.





Technology

Imaging supported by advanced Architecture technology

Digital image processing by F-XT technology

The system is composed of unique parallel processors XT2.0. Images in B mode, M mode, spectrum Doppler and Color Doppler are all processed at a ultrahigh speed on the software.
The system ensures far higher operational efficiency than DSP and FPGA while providing more flexibility than ASIC. Future upgrades of the algorithm, the key in imaging, are available through software revisions... no need for troublesome servicing. The software-based signal processing also enables highly sensitive Doppler examination. While compact, the instrument exhibits the system performance compared favorably with models of higher classes.

Hybrid digital beam former

Through 12-bit high-speed A/D conversion and F-XT technology, the UF-750XT digitally performs various signal processings which have been made with analog circuits in the past.
Thus, the UF-750XT ensures high image quality and high sensitivity with no signal distortion and no deterioration of SN ratio.

Dynamic aperture / Dynamic focus

Through variable dynamic aperture/dynamic focus, all sites from shallow to deep are uniformly imaged sharply with ultrasonic beams.

Compact pinless connector

To improve the S/N ratio of ultrasonic RF signals, it is an important factor to transmit signals from the probe to the amplifier with least loss.
The compact pinless connector outstandingly suppresses crosstalk between channels and enables detection of feeble Doppler signals at a high sensitivity and an excellent S/N ratio.

Efficiency

High level performance in a cost effective system

The ultrasound system with Color Doppler satisfies both the distinguished functional performance in its class and the ease of operation. Thus, it can cope with needs in many departments including the Abdomen, Cardiology and Obsterics/Gynecology.
Also, it can conveniently be used by doctors aiming at echo examination with upgraded skills or intending commencement of practice.

Logical

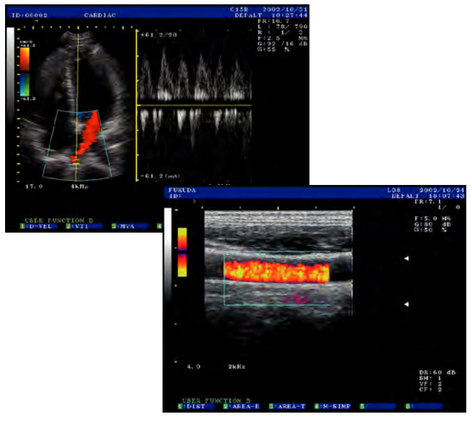
Intuitive operation for ease-of-use

For concentrated observation of images, simple operation is indispensable. With the UF-750XT, keys and knobs with a slightly larger track ball at the center are designed with the priority given to minimum operation during examination.

Look

Diagnosis available from various angles

In addition to examination with monochrome images, various modes are provided for more reliable diagnosis; checking blood flow in Color Doppler mode, measurement of blood flow pattern and flow rate in Pulse Doppler mode. Furthermore, the UF-750XT comes standard with the Power Doppler mode suitable for examination of the feeble blood flow and low-speed blood flow which are difficult to grasp in Color Doppler mode.



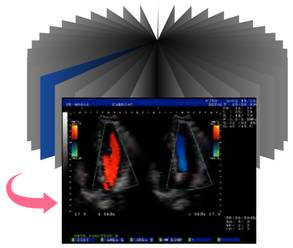
Useful

Functionality made possible multiple modalities

Cine memory

While not limited to echocardiogram, it is unexpectedly difficult to take timing to freeze images in the patients who cannot restrain breathing. The cine memory can temporarily store maximum 535* frames of images just before freezing, thereby allowing for smooth examination without being nervous about timing to freeze.

*The number depends on examination conditions.

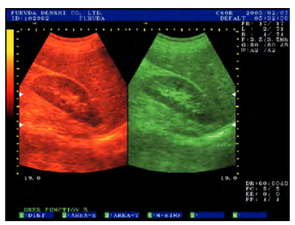


Needle guide

With every probe, the puncture guide line is available on display. The guide line on a ultrasonic image supports safe and sure invading.

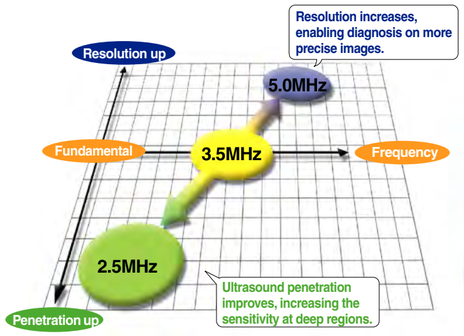
Color scaling image

Ultrasonic images which could have been expressed only in grey scale are now available in four types of color scales for easy visual recognition. Recognition of minute differences in contrast is facilitated.



Multi-frequency imaging

The frequency of the probe can instantly switched through panel key operation. Thus, the doctor can successively examine at an optimum frequency without changing the probe according to the constitution of patient or the examination region.



▲ In case of FUT-CD602-5A Probe

Filing

It is desirable to keep images in a clear condition as at the time of examination. Digital data storage has a merit to enable reproduction of images as clear as examined.
The UF-750XT comes standard with an MO drive for digital data storage. Thus, target data can easily be called up through search based on the date, ID and name if many data are stored. Also, it allows selection of BMP format or JPEG format, which is convenient for compiling information presenting papers at conference.

B width

By making the image display angle smaller, the frame rate can be increased. This function is extremely useful for observation of the blood flow and valve movement in Color Doppler mode.

▼Normal Frame rate

▼High Frame rate

Tissue Harmonic imaging

Tissue Harmonics are a standard feature in our equipment for imaging.
This feature is obtained by filtering and processing of the 2nd harmonic frequency from the received signal.
This special processing allows for low artifact and reduced noise. Increasing the contrast resolution gives better definition for visualizing structures on the most difficult patients.

▲Fundamental

▲THI

Sophistication

Quck Echo Examination available for anywhere diagnosis

The simple and stylish design matches with various healthcare scenes in hospitals. Any place may be the echo examination room whenever the examination is desired.