



U-Lite

EXTENDED

TECHNICAL DATA SHEET

U-LITE EXTENDED TECHNICAL DATA SHEET

U-Lite is the first **Personal Ultrasound** of the market.

In a few years, every health-practitioner will be equipped of his own personal ultrasound, allowing him to check traumas, disease, discomfort, etc. in no time.

To succeed in this challenge of personal ultrasound system, U-Lite had to be designed to be as simple as possible to use, with no compromise on image quality



U-LITE EXTENDED TECHNICAL DATA SHEET

M = Mandatory
D = Desirable
O = Optional

Yes No (provide details)
(Please tick as appropriate)

U-Lite Clause Specification					
1.	<u>General Requirements</u>				
	One unit of light portable diagnostic ultrasound imaging scanner providing black and white anatomic image, color flow Doppler images pulsed wave doppler and Tissue Motion images in real time.		(M)		
1.1	<u>Dimensions and Weight</u>				
	1.1.1	System dimension : 190mm x 135mm	(M)		
	1.1.2	Thickness : 20mm	(M)		
	1.1.3	System weight with battery and probe : less than 820g	(M)		
1.2	<u>Display</u>				
	1.2.1	Flat pad full touch screen display	(M)		
	1.2.2	Screen : 7 inch (Diagonal)	(M)		
	1.2.3	Resolution 1280 x 800 pixels or higher	(M)		
1.3	<u>Battery</u>				
	1.3.1	Build-in Rechargeable battery	(M)		
	1.3.2	Support continuous operation for 1 hour or longer	(M)		
1.4	Wireless transceiver				
			(M)		
1.5	System should be able to scan either on battery or through power adapter				
			(M)		
2.	<u>Imaging and Operating Capacities</u>				
2.1	<u>Imaging</u>				
	2.1.1	B-mode Imaging	(M)		
	2.1.2	M-mode Imaging	(M)		
	2.1.3	Color Flow Doppler Imaging	(M)		
	2.1.4	Pulse Wave Doppler Imaging	(M)		
	2.1.5	Power Doppler Imaging	(M)		
	2.1.6	Tissue Harmonic Imaging	(M)		
	2.1.7	Composite Imaging	(M)		
	2.1.8	Speckle Reduction Exclusive Imaging	(M)		
	2.1.9	Needle Enhancement Imaging	(M)		
2.2	<u>Operating Capacities</u>				
	2.2.1	User friendly user interface	(M)		
	2.2.2	Continuous loop review	(M)		
	2.2.3	Integrated Image Archive	(M)		
	2.2.4	Digital Image Storage and Retrieval	(M)		
	2.2.5	Auto focus adjustment	(M)		
	2.2.6	Auto optimization of image	(M)		
	2.2.7	Auto preset for different exams	(M)		
	2.2.8	System Boot up in less than 15 sec	(M)		
	2.2.9	Universal Digital Beamformer	(M)		
2.3	<u>Video or data Export</u>				
	2.3.1	HDMI port for external display with different screen display (not simple clone image)	(M)		
	2.3.2	USB port for data export	(M)		

U-LITE EXTENDED TECHNICAL DATA SHEET

	2.3.3	Image type shall be in JPG or BMP	(M)		
	2.3.4	Image export shall be transferred to DICOM	(M)		
	2.3.5	Wireless export under wifi	(M)		
2.4	<u>General caliper on device</u>				
	2.4.1	Distance	(M)		
	2.4.2	Area	(M)		
	2.4.3	Volume	(M)		
	2.4.4	Auto volume	(M)		
2.5	<u>OB measurement on device</u>				
	2.5.1	FL	(M)		
	2.5.2	BPD	(M)		
	2.5.3	HC	(M)		
	2.5.4	AC	(M)		
	2.5.5	GA	(M)		
	2.5.6	EFW	(M)		
	2.5.7	Fetal Heart Rate	(M)		
2.6	<u>Bladder measurement on device</u>				
	2.6.1	Auto-volume 2D , 3D	(M)		
3.	<u>User Interface</u>				
3.1	A navigation wheel or equivalent facility shall provide an intuitive user interface with minimal manual controls.		(M)		
3.2	Dedicated specialty presets besides general ABD shall be provided for the following exams				
	3.2.1	Cardiac	(M)		
	3.2.2	Obstetric	(M)		
	3.2.3	Bladder	(M)		
	3.2.4	Vascular	(M)		
	3.2.5	Biopsy	(M)		
3.3	Up to 4 number of caliper / measurement results shown on same screen		(M)		
4.	<u>Data Export</u>				
4.1	Imaging data shall be stored to USB memory stick or equivalent via USB cable		(M)		
4.2	Local storage capacity shall not be less than 16GB		(M)		
4.3	Date shall be stored and export in both JPG and DICOM		(M)		
4.4	Wireless image uploading shall be available to cloud under wifi		(M)		
5.	<u>Transducers</u>				
5.1	The system shall be equipped with one Broadband <u>Convex Array Probe</u> with the following features:-		(M)		
	5.1.1	Applications : Emergency, Abdomen, Gyn, OB, Urinary bladder, Kidney, pulmonary	(M)		
	5.1.2	Broadband Probe with automatic frequency adjustment for optimal imaging with depth change	(M)		
	5.1.3	Transducer Band with : 2-5 MHz or wider	(M)		
	5.1.4	Probe Geometry : Radius 60mm	(M)		
	5.1.5	Number of Elements : 192 or higher	(M)		
	5.1.6	Imaging depth : up to 30 cm or more	(M)		
	5.1.7	PW to show pulse wave and do auto calculation of PI, RI, HR	(M)		

U-LITE EXTENDED TECHNICAL DATA SHEET

5.2	The system shall be equipped with one Broadband <u>Linear Array Probe</u> with the following features:-				
5.2.1	Applications : Emergency, Thyroid, MSK, Small Parts, Anesthesia, Thoracic / Pleural fluid, Vascular,	(M)			
5.2.2	Broadband Probe with automatic frequency adjustment for optimal imaging with depth change	(M)			
5.2.3	Transducer Brand with : 10-18 MHz or wider	(M)			
5.2.4	Probe Geometry : 40mm	(M)			
5.2.5	Number of Elements : 192 or higher	(M)			
5.2.6	Imaging depth : up to 5 cm or more	(M)			
5.2.7	PW to show pulse wave and do auto calculation of PI, RI, HR	(M)			
5.3	The system shall be equipped with one Broadband <u>Endo-cavity Array Probe</u> with the following features:-				
5.3.1	Applications : Gynecology , OB, Urology, Prostate	(M)			
5.3.2	Broadband Probe with automatic frequency adjustment for optimal imaging with depth change	(M)			
5.3.3	Transducer Brand with : 4-9 MHz or wider	(M)			
5.3.4	Probe Geometry : Radius 10mm	(M)			
5.3.5	Number of Elements : 128 or higher	(M)			
5.3.6	Imaging depth : up to 18 cm or more	(M)			
5.3.7	PW to show pulse wave and do auto calculation of PI, RI, HR	(M)			
5.4	The system shall be equipped with one Broadband <u>Phased Array Sector Probe</u> with the following features:-				
5.4.1	Applications : Cardiac, Cranial, Abdomen, OB, Paediatric, Thoracic / Pleural fluid	(M)			
5.4.2	Broadband Probe with automatic frequency adjustment for optimal imaging with depth change	(M)			
5.4.3	Transducer Brand with : 1.7-4 MHz or wider	(M)			
5.4.4	Number of Elements : 64 or higher	(M)			
5.4.5	Imaging depth : up to 30 cm or more	(M)			
5.4.6	The Color flow sector shall represent blood flow within a field of view of up to 30 degrees or wider.	(M)			
5.4.7	PW to show pulse wave and do auto calculation of PI, RI, HR	(M)			
5.5	The system shall be equipped with one Broadband <u>Micro-convex Array Sector Probe</u> with the following features:-				
5.5.1	Applications : Pediatric, Emergency, Obstetrics	(M)			
5.5.2	Broadband Probe with automatic frequency adjustment for optimal imaging with depth change	(M)			
5.5.3	Transducer Brand with : 4-9 MHz or wider	(M)			
5.5.4	Number of Elements : 128 or higher	(M)			
5.5.5	Imaging depth : up to 15 cm or more	(M)			
5.5.6	PW to show pulse wave and do auto calculation of PI, RI, HR	(M)			
5.2	The system shall be equipped with one Broadband <u>Linear Array Probe</u> with the following features:-				
5.2.1	Applications : Emergency, Thyroid, MSK, Small Parts, Anesthesia, Thoracic / Pleural fluid, Vascular, Breast	(M)			
5.2.2	Broadband Probe with automatic frequency adjustment	(M)			

U-LITE EXTENDED TECHNICAL DATA SHEET

		for optimal imaging with depth change			
5.2.3		Transducer Brand with : 5-15 MHz or wider	(M)		
5.2.4		Probe Geometry : 50mm	(M)		
5.2.5		Number of Elements : 256 or higher	(M)		
5.2.6		Imaging depth : up to 8 cm or more	(M)		
5.2.7		PW to show pulse wave and do auto calculation of PI, RI, HR	(M)		
6.	<u>Accessories</u>				
6.1	Each set of equipment shall be equipped with the below accessories:-		(M)		
6.2	<u>Charging Station with:-</u>				
	6.2.1	Universal power supply with 220V \pm 6%, 50Hz \pm 2% and power plug suitable for use in the Hospital	(M)		
	6.2.2	Micro-USB connection to PC (USB 1.1 or better) and the cable shall be provided if essential for data transfer. Scanners using other effective means such as USB storage device will also be accepted	(O)		
	6.2.3	<u>Electrical Power Requirements</u>			
		6.2.3.1 Input Voltage : 200VAC \pm 6%	(M)		
		6.2.3.2 Output Voltage : 5 VDC	(M)		
		6.2.3.3 Frequency : 50Hz \pm 2%	(M)		
6.3	Software updates for the scanning equipment can be done wireless under wifi or through USB		(M)		
7	<u>Safety Requirements</u>				
7.1	Equipment offered shall comply with the safety requirements of IEC60601 or equivalent.		(M)		
7.2	Equipment offered shall comply with the electromagnetic compatibility (EMC) requirements of IEC60601-1-2 or equivalent.		(M)		
7.3	The equipment shall remain operational and within specification throughout the voltage range of 220V \pm 6%, 50Hz \pm 2%, 1-phase A.C. electrical supply		(M)		
7.4	If essential for operation, and AC adaptor shall be provided. The AC adaptor shall be class II device, according to clause 14 of IEC60601-1:1988 or equivalent. Scanner operates without AC adaptor will also be accepted.		(M)		
7.5	Single phase mains operated equipment shall be fitted with a power plug suitable for the site condition. The plug shall comply with relevant standards e.g. BS1363 for 13A plug.		(M)		
7.6	Equipment offered shall comply with IEC60601-2-37, particular requirements for the safety of ultrasonic diagnostic and monitoring equipment, or equivalent.		(M)		

Options

Dedicated Protech Support:



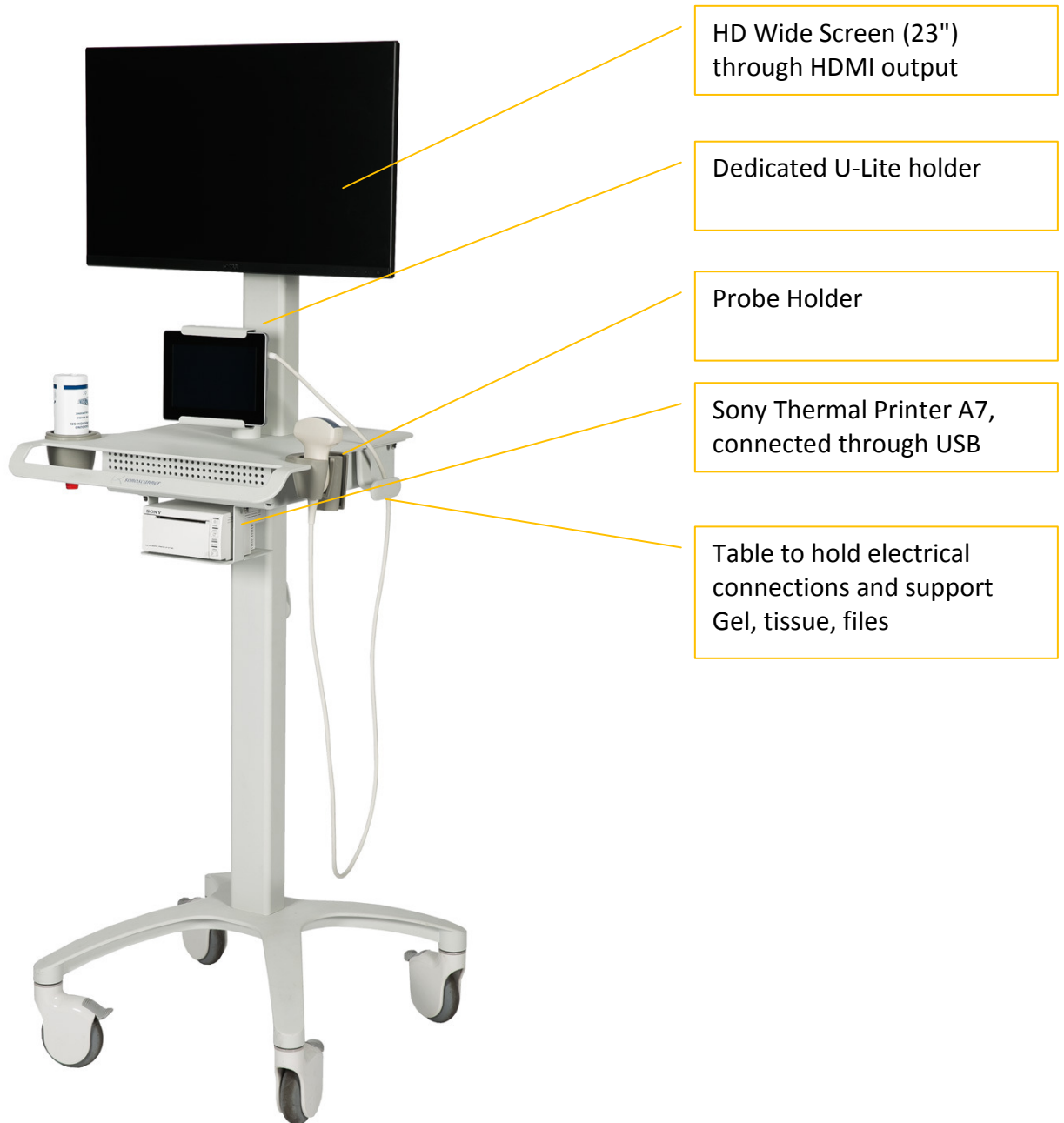
U-LITE EXTENDED TECHNICAL DATA SHEET



U-LITE EXTENDED TECHNICAL DATA SHEET

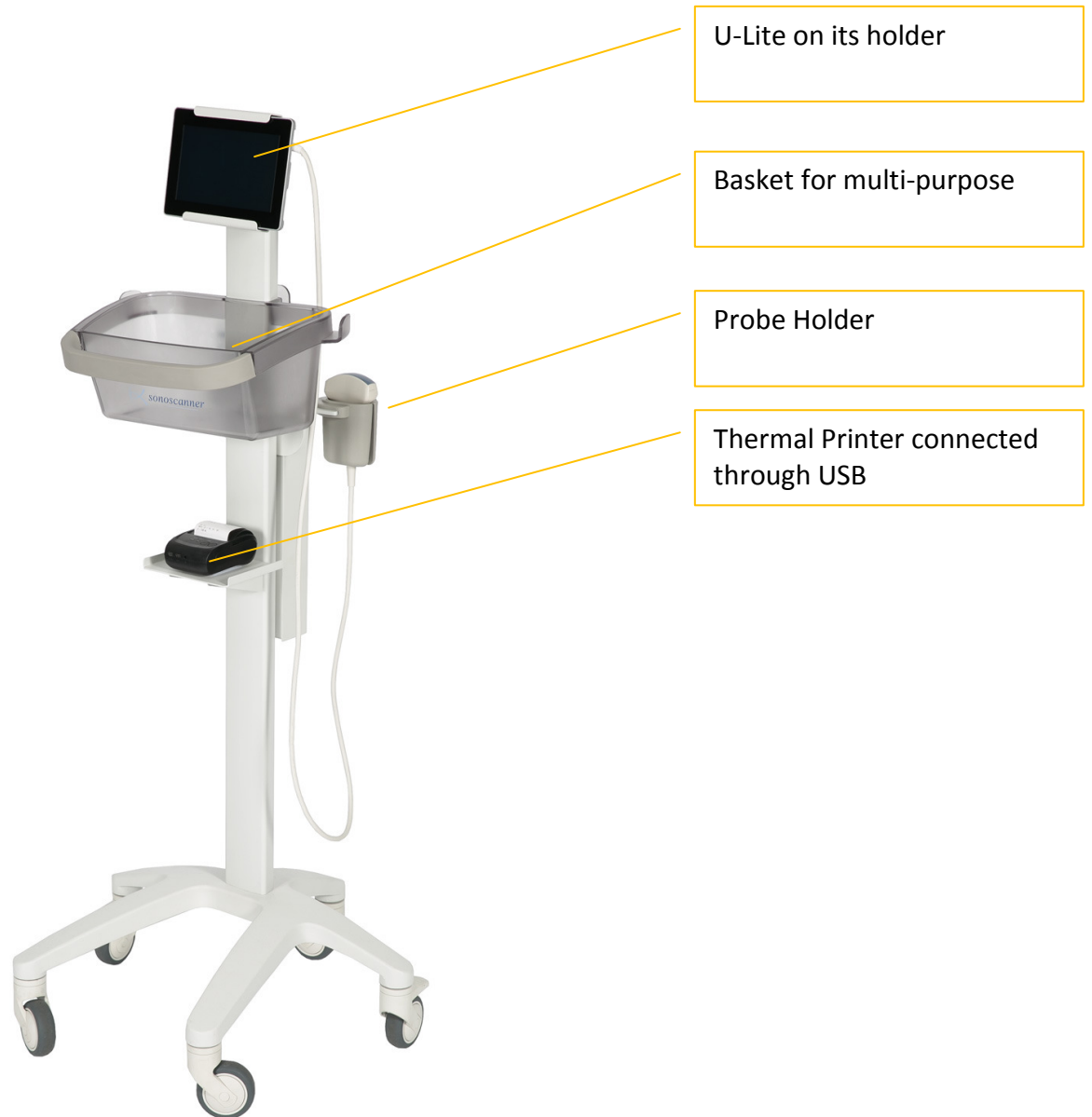
Dedicated HD Cart Support:

Through this special cart, U-Lite displays image on big HD Screen



**Once connected to the HDMI Screen, U-Lite becomes a keyboard of a full display
Ultrasound**

Dedicated Cart Stand Support: Light cart design to carry the U-Lite





Sonoscanner
6 rue André Voguet
94200 Ivry-Sur-Seine
France