

AMDA-Nepal  
Siddhartha Children and Women Hospital  
**Technical Specification of STATIC USG (Colour Doppler)**

S.N.	Purchaser's Specifications	Bidder's Compliance (Yes / No)	Ref Page No	Remarks
	<b>USG (Colour Doppler ) Machine with Echo Neonatal Probe.</b>			
	<b>Manufacturer:</b>			
	<b>Brand:</b>			
	<b>Type/Model:</b>			
	<b>Country of Origin:</b>			
	<b>Country of manufacture:</b>			
<b>1</b>	<b>Description of Functions:</b>			
1.1	A fully digital Colour Doppler ultrasound DICOM compatible imaging system for Radiology, OB /Gyn, vascular, Cardiac, small parts applications with fetal echo features			
1.2	Neo/PED cardiac compatibility with many cardiac features and Auto IMT/TGC			
1.3	Cardiac stress and strain echo analysis			
1.4	Color Doppler mode (CW)			
1.5	Pulse wave (PW) doppler mode			
1.6	Continuous wave doppler mode			
<b>2</b>	<b>System Configurations</b>			
2.1	Digital colour Doppler ultrasound machine with echo features,- 1 unit			
2.2	2 to 8 MHz. broadband convex (curved) array transducer, -1 unit			
2.3	3 to 16 MHz. broadband linear array transducer,- 1 unit			
2.4	3 to 8 MHz. Cardiac Probe -Neonatal/Ped- transducer, 1 unit			
2.5	B/W Video Thermal printer of latest model, 1 unit.			
2.6	Ultrasound gel warmer with system, 1 unit			
<b>3</b>	<b>Technical Specifications</b>			
3.1	System shall provide all-digital broadband beam forming with maximum display depth shall be at least 38 cm.			
3.2	System shall be performing routine exams and detailed evaluations of obstetrics, gynecology, small organs and fetal cardiology with PW and CW features.			
3.3	The system must support four broadband Phased array, Convex, Linear, fetal echo and Ped/Adu array transducers.			
3.4	Digitally controlled, at least 21 inch or bigger size Flat Panel monitor with tilt & swivel facility with at least 10 inch touch panel screen monitor.			
3.5	System shall have at least four (4) active ports to run four different transducer.			
3.6	Full alphanumeric keyboard.			
3.7	Slide pot TGC & LGC gain controls with pre-defined curves.			
3.8	System must be a new generation ergonomically designed to curb minimum injury to sonographer/ physician with keyboard platform rotatable and moveable (up/down).			
3.9	System must support Tissue Harmonic Imaging in Phased Array, Linear Array and convex array transducers.			
3.10	Power Doppler for small flow shall be available along with latest technology flow/B Flow/Dynamic flow technology.			
3.11	Colour coded tissue Doppler must be available with quantification for Myo cardiac thickness and strain rate imaging as option			
3.12	Shall have stress echo with ECG rating.			
3.13	System shall offer Contrast harmonic imaging and must have optimization settings to detect contrast agents. Please specify other advanced technologies to perform better contrast harmonic imaging			
3.14	Exhaustive software for Cardiovascular applications with report formats.			
3.15	To ensure maximum clinical utility, the manufacturer must demonstrate the capability of the system to successfully perform in the following types of applications:			
	· Abdominal			
	· Small parts and superficial			
	- Paediatric			
	- Musculoskeletal			
	- Obstetrical			
	- Gynaecological and fertility			
	- Cardiac/ fetal Echo			
· Vascular (Peripheral, Cerebrovascular, and Intraoperative)				
3.16	System should have at least 850000 system processing channel. It should be clearly mentioned in the data based.			

3.17	The system architecture shall be designed to simultaneously process the entire bandwidth of transducer received frequency from 1 to 16 MHz.			
3.18	Further upgradeable; and should be quoted separately single crystal cardiac probe and 5D NT .			
3.19	System should have inbuilt min 512GB SSD drive with at least 8GB RAM.			
4	<b>Accessories, Spare Parts and Consumables</b>			
4.1	<b>Accessories:</b> · Black and white video thermal printer. · Ultrasound gel warmer: 02 bottles.			
4.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above)			
5	<b>Operating Environment</b>			
5.1	The system offered shall be designed to store and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, temperature, humidity etc.			
5.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metres in length.			
5.3	Shall provide UPS of suitable rating with voltage regulation and spike protection for 30 minutes back-up.			
6	<b>Standards &amp; Safety Requirements</b>			
6.1	Should submit min two to four installation and satisfactory report for the same quoted model from any government institution with bid documents.			
6.2	Must submitted USFDA approved product certificate.			
7	<b>Installation and Commissioning &amp; User Training</b>			
7.1	Supplier must accomplish proper installation and commissioning of the equipment onsite.			
7.2	Must provide user training (including how to use and maintain the equipment)			
8	<b>Warranty &amp; Maintenance Service During Warranty Period</b>			
8.1	Comprehensive warranty (Software, hardware/parts, maintenance labor cost, etc) for 3 years after installation			
8.2	During warranty period supplier must ensure preventive maintenance and corrective/breakdown maintenance whenever required			
9	<b>Authorization</b>			
9.1	Manufacturer's Authorization or Local Distributor Authorization (Manufacturer's Authorization to the main Distributor is also required in case of Local Authorization)			
10	<b>Documentation</b>			
10.1	User (Operating) manual in English			
10.2	Service (Technical / Maintenance) manual in English			
10.3	List of important spare parts and accessories with their part numbers and costing.			
10.4	Certificate of calibration and inspection from factory.			
10.5	Shall accomplish the Qualification Criteria of the bidder mentioned in the main bid document			