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ANX D TO
DGDP TENDER NUMBER 216.07.483.25
DATED: 06 NOVEMBER 2025

DESCRIPTION OF TECHNICAL SPECIFICATION FOR COLOR DOPPLER ECHOCARDIOGRAPHY MACHINE WITH ADULT, PAEDIATRIC, NEONATE AND FOETAL PROBE AND STANDARD ACCESSORIES

QUANTITY-01. (DP-5)

(Tenderer must fill up this format without changing its basic structure)

Ser no	Description	Technical specification	To be filled up by the supplier
(a)	(b)	(c)	(d)
1.	<u>General Specification:</u> General specifications are as under :		
	a. Nomenclature	Color Doppler Echocardiography Machine With Adult, Paediatric, Neonate and Foetal probe and Standard Accessories, PVMS- 270294, Qty-01	
	b. Brand	To be mentioned.	
	c. Model	To be mentioned. Model should be latest.	
	d. Name of Manufacture with Complete Address	To be mentioned.	
	e. Name of Principal with Complete Address	To be mentioned.	
	f. Name of Local Agent with Complete Address	To be mentioned.	
	g. Year of Production	Not before the calendar year of contract.	
	h. Country of Origin & Manufacturer	Group-A: Bangladesh, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Indonesia, Ireland, Japan, Luxemburg, Netherlands, Norway, Singapore, Spain, Sweden, Switzerland, Turkey, UK, USA, South Korea & Italy.	
	j. Port of shipment	Same country of manufacture for Main System. Other Items/ Equipments/ Accessories and Local supplied item to be mentioned specifically.	
2.	<u>Features/Facilities:</u> Details to be mentioned.		
3.	<u>Technical Specification:</u>		
	a. The system must be latest generation, highest & technologically advanced digital 2D TTE & TEE echocardiography system. With More than 4.5 million channels.		
	b. TTE Probe is upgradable.		
	c. System should have frame rate up to 3000 FPS.		
	d. System must have foetal, neonate, children & adult cardiology transducer with broadband technology or equivalent for excellent greyscale image quality on difficult to image patients. The system should have steerable color Doppler available with all imaging probes. Please mention the technology used in the transducer.		
	e. System must be offered with a minimum 21 inch or higher high-resolution monitor with infinite position adjustments.		
	f. System should have at-least four imaging active probe ports with electronic switching facility from keyboard without probe adapter.		
	g. System should support board band probes spanning a frequently of 1-18 MHz (+-2).		
	h. Operating modes B-mode, M-Mode, B/M Mode, Doppler MODE, Color flow, Power Doppler, B/Color flow, PW Doppler, CW Doppler, Live Color Anatomical M-Mode, B-Flow.		



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	j. Image storage facility on in build hard disc with capacity of 500GB. System should have extensive image management capability including thumb nail review, Cine loop editing etc.		
	k. Maximum field-of-view range (depth): 0 – 60 cm, minimum field-of-view range (depth): 0 – 2 cm. System should be capable of scanning depth of 30-60cm. Scanning Depth should be clearly mentioned in the technical quoted if not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the scanning depth of 30-60 cm in the offered system		
	l. B mode & B color simultaneous should be available side by side real time display of B-Mode & Color flow. Digital zoom facility for region of interest in real time and frozen imagine.		
	m. System must be offered with Speckle Reduction Imaging: Image processing technique to remove speckles and clutter artifacts.		
	n. Should be able to perform advanced quantification measurements like Automated strain & CRT quantification. Should measure the myocardial velocity and derives the strain rate and strain along user-defined M-lines, Capable of drawing up to M-lines at a time, Capable of sub-dividing each M-line into 8 sub-regions or according to user-defined sub-region sizes, Point of interest tool obtains values from any point on the M-mode display. In addition to the tissue Doppler based strain system should have 2D based strain like AFI or Automated Strain for LV , LA and RV should be offered. System should have all standard and following advance soft- warm ,TVI, TSI, TT, Strain & strain rate imaging, AFI (LV,RV and LA), Auto EF, TVI M-Mode, stress echo package, Q-Analysis.		
	p. Advanced measurements & calculation package for vascular and cardiac should be available. System should have automated/semiautomated 2D tools for TAPSE, LA Volume, EF assessment.		
	q. System must be offered with user friendly high resolutions user interface touch panel of minimum size of 12.0 inch or intuitive keyboard. User friendliness will be given preference.		
	r. System must be offered with a 2D frame rate of at least 3000 frames/second or more. Acquisition frame rate should be clearly mentioned in the technical quote If not mentioned Please attach a letter from manufacturer along with the technical bid clearly stating the frame rate of the offered system.		
	s. Contrast Imaging should be offered as standard on the system, with optimization for Low and HI MI applications. Should also have facility of LOW MI with triggered replacement Imaging.		
	t. Integrated stress Echo facility to perform Stress Echo exams.		
	u. Should have the state of the art Transmit real time compound Imaging Technology with Multiple transmitted lines of sight, wherein multiple coplanar Images from different viewing angels are obtained and combined into a single compound image at real-time frame rates for improved visualization. Should demonstrate and show multiple transmitted line of sight in liner probes.		
	v. Cardiac Auto doppler with Artificial intelligence.		
	w. System should have LIMP, RIMP, and Continuity equation.		
	x. System should have post processing, Offline M mode, offline Baseline shift.		
	y. System should be offered with Software beam forming technology. cSound/nSightPlus or equivalent.		
	z. 2D AI based measurement should be offered.		
	aa. System should be upgradeable to Neonatal TTE and TEE probe		
	bb. Strain Measurement to be offered as standard in the system		
	cc. System should be upgradeable with ICE Compatibility		
	dd. Equipment must be able to show Z Score for Paediatric as well as adult individual.		
	ee. System should be upgradeable to matrix 2D with Colour Doppler TEE		
	ff. Following latest Transducers (Frequency tolerance +/-2MHz) should be supplied with the system:		



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	(a) 4-12 MHz Broadband Neonate echo transducer for Neonatal cardiology imaging								
	(b) 2-8 MHz Broadband latest paediatric echo transducer for paediatric and small adult cardiology imaging.								
	(c) 1-5 MHz Matrix/Single crystal latest Adult echo transducer								
	(d) 2.3-8.4 MHz Convex Transducer for foetal Echo application.								
4.	Standard Accessories: (a) Thermal B/W Printer. (b) 3 KVA online UPS. (c) Color Printer (Print command via main console not via PC)								
5.	Optional accessories (if any):To be mentioned								
6.	Power Supply	Auto stabilized 220 -240 VA							
7.	Complete BOQ/BOM. All Foreign & Local supplied items to be listed separately for full range of operation of the equipment as per following table:								
	Ser	Name of item	Qty	Brand	Model	Country of Origin	Country of Manufacturer	Remarks	
8.	<u>Local Training</u> a. Operational Training 02x Peadiatric Cardiologist for 01 week. b.Repair/Maintenance Training 04x EM Technician for 02 week								
9.	Warranty	05 (Five) years warranty from the date of issuance Inspection Note (I/Note)							
10.	After sales service	10 (Ten) years from the date of installation.							
11.	Certificate of quality	US-FDA & EU-CE / US-FDA & JIS Certificate							
12.	Terms and Condition	a. The installation list in Bangladesh of offered model must be submitted with the offer. b. Availability of spare parts for 10 years from the date of Installation and commissioning (functioning).							
13.	Books and Publication	Following books and publication will be supplied in English along with the stores free of cost. a. Operational manual – 03 Copies (01x Original & 02x Photocopies) b. Repair/Maint/Service manual including details circuit Schematic diagrams– 03 Copies (01x Original & 02x Photocopies) c. Parts Catalogue/Master Parts list– 03 Copies (01x Original & 02x Photocopies) d. 100% Spare Parts list with price – 02 x Original copies Note: In addition to hard copy, a soft copy CD/DVD containing all books and publications will be supplied by the supplier free of cost.							
13.	If any other feature/items not listed above but required for full range of operation of the offered equipment to be mentioned and to be supplied free of cost with main equipment.								
14	Comprehensive Maintenance Contract (CMC): The supplier will submit a price offer for Comprehensive Maintenance Contract (CMC) for 03 (Three) years which will be applicable after the warranty period. Non stopping service shall be provided by manufacture authorized local agent/vendor. Terms & Conditions as per Government policy.								

