

**PROCUREMENT OF 2D ECHOCARDIOGRAM MACHINE PEDIA / NEONATE  
IB NO. 2023-05-08 (19)**

<b>2D ECHOCARDIOGRAM MACHINE</b>		
<b>1 unit @ PHP 12,000,000.00</b>		
<b>Total ABC: PHP 12,000,000.00</b>		
<b>DESCRIPTION</b>		
		This state-of-the-art ultrasound machine should have the latest specifications on Color Doppler System with 3D capable technology for cardiac and general neonatal applications
<b>1.FUNCTION:</b>		
Clinical or other purpose		Transthoracic Echo with Color Doppler System with advanced 2D and or 3D capabilities.
		General Neonatal Ultrasound use
Clinical department/ward		Neonatal ICU, Pediatric ICU (to include adolescents)
2.Operational Requirements:		<b>2.1</b> Latest generation Electronic Phased array Doppler system with Minimum 1000 Electronic independent channels. System should be DICOM ready.
		<b>2.2</b> All new software should be upgraded free of cost for at least 3 years on site and must be compatible with other connected devices like monitors and printers.
<b>TECHNICAL SPECIFICATIONS:</b>		
		<b>3.1</b> Latest generation Electronic Phased array Color Doppler system with Minimum 1000 Electronic independent channels.
		<b>3.2</b> 256 gray shades for sharp contrast resolutions.
		<b>3.3</b> Adult, Pediatric and Neonatal Trans thoracic Cardiac Probes to be supplied which should be latest generation broad band transducers.

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	<b>3.4</b> Harmonic Imaging- System should have Harmonics on all the probes.
	<b>3.5</b> Trapezoidal Image on B / Color.
	<b>3.6</b> Automated Gain control for additional level of flexibility to image quality control.
	<b>3.7</b> Real time high frequency 2D and or 3D for higher resolution.
	<b>3.8</b> High-definition acoustic zoom for enlarging sections of 2D and Color flow images with more acoustic information for greater clarity and detail while maintaining an optimal frame rate.
	<b>3.9</b> Modes –2D, M-Mode, Anatomical M mode, color M mode Steerable PW/CW Doppler, Color Doppler, and Color power angio imaging and Directional color power angio. Dual mode. Duplex mode of 2D & Doppler.
	<b>3.10</b> Monitor should be 15" or more, high-resolution Color Monitor. Tilt and Swivel monitor should be able to view in all angles and all light conditions.
	<b>3.11</b> Tissue Colorization (B-Color) for improved contrast resolution.
	<b>3.12</b> Software for Adult, Pediatric and Neonatal Cardiac application, advanced cardiac calculation, Measurement and Cardiac analysis, Carotid & other Peripheral Vascular presets, including strain echocardiography. (All application package should be built into the system)
	<b>3.13</b> Cine loop memory. a. High Frame rate review for better clarity of playback images study in slow motion.
	<b>3.14</b> ECG facility.
	<b>3.15</b> User defined system and application presets for multi-user department.

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		3.16 Minimum 500 GB hard drive for image storage and retrieval.
		3.17 Three or more transducer ports.
		3.18 USB port for recording, Bluetooth capable
		3.19 Transducer gel heater
<b>4. SYTEM CONFIGURATION ACCESSORIES, SPARES AND CONSUMABLES</b>		
	<b>4.1 Transducers</b>	<b>4.1 Transducers :</b>
		A. 2 Neonatal echo transducer/probe
		B. 3 Pediatric echo transducer/probe
		C. 4-Adult echo transducer/probe
		D. 5-General purpose ultrasound transducer/probe
		4.2 B/W or Colored printer of latest model.
		4.3 DVD/CD Recorder with DICOM media transfer.
		4.4 Echopac Clinical Workstation with post-processing offline—even multi-dimensional analyses—on images.
<b>5. ENVIRONMENTAL FACTORS</b>		
		5.1 The unit shall be capable of operating continuously in ambient temperature of 30 deg C and relative humidity of 80%.
		5.2 Pre-Requisites should be clearly spelt out in terms of room requirements.
<b>6. POWER SUPPLY</b>		
		6.1 Power input to be 220-240VAC, 50Hz.
		6.2 Resettable overcurrent breaker shall be fitted for protection.
		6.3 Suitable Servo controlled Stabilizer/CVT.
		6.4 Online UPS of suitable rating with voltage regulation and spike protection for 30 minutes back up
		6.4 Automatic Voltage Regulator medical grade
<b>7. STANDARDS, SAFETY AND TRAINING</b>		

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	<p><b>7.1</b> Should be FDA or CE approved product.</p> <p><b>7.2</b> Electrical safety conforms to standards for electrical safety.</p> <p><b>7.3</b> The product shall comply to standard safety for Medical Electrical Equipment: Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment.</p> <p><b>7.4</b> Type of protection against electric shocks -- Class I Degree of protection against electric shocks for ultrasound probes Type "BF" For ECG electrodes Type 'CF'</p> <p><b>7.5</b> Manufacturer/Supplier should have ISO certification for quality standards.</p>
International Standards	IEC 60601-1:2012 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
<b>8. DOCUMENTATION</b>	
	<p><b>8.1</b> User manual in English.</p> <p><b>8.2</b> Service manual in English.</p> <p><b>8.3</b> List of important spare parts and accessories with their part number and costing available in stock with the supplier.</p>
<b>9. MAINTENANCE AND SERVICEABILITY</b>	
	<p><b>9.1</b> Comprehensive warranty (3 years) &amp; 5 years CMC after completion of warranty period.</p> <p><b>9.2</b> Optional Service agreement after Guarantee period.</p> <p><b>9.3</b> Online phone Support.</p> <p><b>9.4</b> Clinical application support.</p> <p><b>9.5</b> Training of hospital engineers &amp; staff.</p> <p><b>9.6</b> Rates of consumables &amp; accessories should be freeze for 3 years.</p> <p><b>9.7</b> Operating and detailed service manual should be supplied.</p> <p><b>9.8</b> Must submit User list and performance report.</p>
<p><b>10-</b> Vendor has to support the specifications with manufacturer’s brochure, failing which offer will be rejected. Vendor has to demonstrate the equipment within specified time limit, if asked for; failing which offer will be rejected.</p>	

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<b>DELIVERY PERIOD</b>	ITEM SHALL BE DELIVERED WITHIN 45 CALENDAR DAYS FROM RECEIPT OF NOTICE TO PROCEED INCLUDING ITS INSTALLATION
<b>TERMS OF PAYMENT</b>	Following full delivery, commissioning, and compliance with all required documentation in accordance with audit rules and regulations, payment shall be processed immediately.
<b>Validity of the Contract / Contract Termination</b>	Without prejudice to the provision of applicable laws, rules and guidelines, the Contract shall be automatically terminated under the following conditions (any of the two ) :
	a. When the total quantity specified in the Contract has been exhausted, delivered, installed, commissioned and able to comply all requirements set by the Procuring Entity
	b. For any justifiable reason ground where the contract will not redound to the benefit of the government or there is violation of the contract.
<b>General Conditions</b>	All other rules governing contract implementation and termination under RA 9184 and its IRR, and relevant procurement policies shall be applicable.

**NOTE:**

***This Technical Specification is not a referenced to a specific brand of the equipment, and duly signed by the members of the Technical Working Group.***