



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340307/320
E mail: procurement@wbmsc.gov.in

Supply and Commissioning of 3D Echocardiography machine for the department of CTVA
at R.G. Kar Medical College & Hospital

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT-733/2024

Dated-11.12.2024

AMENDMENT-I

REVISED TECHNICAL SPECIFICATION

High End Live 3D Echocardiography System for Cardiac Anaesthesia

1. System Architecture

- a) The system must be Latest generation, top of the line, technologically advanced Digital 40 (Live 3D) Echocardiography system for Transthoracic and Transesophageal adult. Any other model other than the highest end and the latest version system offered will be liable for rejection.
- b) System must be offered with a minimum of 70million digital processed channels. Original technical data sheet should be enclosed in technical bid to support the number of channels on the systems.
- c) System must be offered with a minimum 21 inch High Resolution Flat Panel Medical Grade Display monitor with nearly infinite position adjustments.
- d) System must have at-least four Imaging universal active probe ports with electronic switching facility from keyboard without probe adapter.
- e) System must be offered with user-friendly high-resolution user interface touch panel of minimum size of 12 inch or intuitive keyboard with twin view facility.
- f) System should support broadband probes spanning a frequency of 1-22MHz.

- g) Image storage facility on in build hard disc or MOD/CD/DVD-RW facility should be available. In built hard disk with capacity of 1TB. System should have extensive image management capability including thumb nail review, Cineloop editing etc.

2. **Imaging Technologies**

- a) System must be offered with Speckle Reduction Imaging: Image processing technique to remove speckles and clutter artifacts.
- b) System should be capable of scanning depth of 40cm.
- c) System should have multiple lines acquisition capable of achieving very high frame rates, at least 2800 or more frames per second. System must allow frame-by-frame review.
- d) Contrast Specific Imaging: The system shall support Contrast Specific Imaging capability. It should provide for LV opacification, Myocardial Perfusion Contrast Echo and support both Low and Hi Mechanical Index.

3. **Cardiac Quantification Tool**

TEE based automated 3D Mitral Valve analysis of anatomy and dynamic mechanics during systole for per-operative and post-operative cases.

4. **Standard Transducers (to be supplied with the Equipment)**

| | |
|----------|---|
| a | 4D (Live 3D) Echo Matrix TEE Transducer for Adult 4D (Live 3D) with frequency ranging from 3-7 MHz (± 1 MHz) with user programmable button and biplane doppler. This probe must support a minimum of 2500 elements for exceptional 4D (Live 3D) image quality on the matrix array transducer to simultaneous display of two real-time live high-quality image planes. System must be offered with quantification tool to access the mitral valve 3D data sets. |
| b | Single Crystal 1to 5 (± 1 MHz) transducer for adult TTE 2D probe |

ECHO Navigation

The system should be future upgradeable to automatically fuse live 3D TEE and live Cath lab in real time for intuitive guidance of the device in the 3D space for following clinical benefits and uses.

- Live Image guidance to lower barriers while treating structural heart disease.
- Accuracy in device targeting.

Certificate to be required: The bidder should submit valid CDSCO Certificate / Registration / License for both the manufacturer(s) and importer(s) as applicable.