



Government of West Bengal  
Office of the Principal  
Nil Ratan Sircar Medical College  
Kolkata – 700014; Phone: 033-2286-0033  
Website: [www.nrsmc.edu.in](http://www.nrsmc.edu.in); e-mail: [principalnrsmc@gmail.com](mailto:principalnrsmc@gmail.com)

Memo No. NMC/STORE/ 178

Dated: 13/01/2025

**Re-E-TENDER NOTICE (NIT No: 51 / 24-25) FOR PURCHASE AND INSTALLATION OF  
EQUIPMENT FOR CARDIOLOGY OF  
NIL RATAN SIRCAR MEDICAL COLLEGE, KOLKATA - 700014.  
(Through Pre-qualification)  
(Submission of Bid through NIC e- tender portal)**

The Principal, Nil Ratan Sircar Medical College, Kolkata – 700014, is going for e-Tender on behalf of the Health & Family Welfare Department, Government of West Bengal for obtaining the rate of equipment as per list from bonafide Manufacturer/Direct Importer/Authorized Distributors. Necessary earnest money to be submitted for participation in the Tender is appended in the table below. Exemption of EMD is applicable to agencies having valid, item specific certificate issued by appropriate authority of Govt. of West Bengal.

1)

Serial No	Name of equipment	Department	Quantity	Earnest Money
1	High End Echo Doppler machine	Cardiology	1 pc	Rs. 160000.00

**All bidders must complete their technical demonstration of their quoted items within ten (10) days from the date of opening of technical bid to the concern Department.**

**1. General Instructions:**

In the event of e-filing, intending bidder may download the tender documents free of cost from the website: <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate or from the Health & Family Welfare Department's website [www.wbhealth.gov.in](http://www.wbhealth.gov.in).

**2. Submission of Bids:**

Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed, in the website <http://wbtenders.gov.in>. All papers must be submitted in English language.

**3. Time Schedules:**

The time schedule for obtaining the bid documents, pre bid meetings, registration with the tendering authorities, the submission of bids and other documents etc. will be as per **the list provided in clause no 23** as given below. Bidder are instructed to wait for uploading any corrigendum arising during pre bid meeting, before submitting their bid online



#### 4. Eligibility for Quoting:

**Only Manufacturers/direct Importers/Authorized Distributors are eligible for quoting.** The price is to be quoted in Indian Rupees including cost of insurance, packing, forwarding, freight charges, clearing charges and installation of the new instrument and exclusive of GST and other taxes which are to be quoted separately in the BOQ. Agency commission is not permissible.

#### 5. Submission of Tender:

The tender is to be submitted in Two Bid System (Technical Bid or Bid A & Financial Bid or Bid B).

##### (A) Technical Bid or Bid A:

#### "BID A": PART I

**File containing Technical Bid only - single file with multiple scanned pages containing Statutory and My documents separately.**

**(a) STATUTORY** Cover containing the following documents:

(SINGLE FILE MULTIPLE PAGE SCANNED)

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

Sl. No.		Page no
	<b>Duly filled in CHECK LIST in the prescribed format. Page number of documents must be mentioned in the check list before uploading the same.</b>	
1	Application in the prescribed format given in Annexure I	
2	Copy of agreement between the manufacturer and the Distributor in Annexure II	
3	No conviction certificate in the form of an Affidavit as per Annexure-III	
4	A Proof of submission of applicable EMD	

**(b) NON STATUTORY/MY DOCUMENTS** Cover Containing the following documents:

Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Renderer for participation in the tender viz.

Sl. No.	Category	Sub Category	Sub Category Description	Page No
A	Certificates	A1. Certificates	PAN Card of the authorized signatory	
			Professional Tax Registration certificate	
			GST Registration certificate	
B		C2 : CREDENTIAL 2	A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.	
			List of purchaser in Govt. Institutions of repute, for last two years	
C.	FINANCIAL INFO	PAYMENT CERTIFICATE 1	Income Tax Returns submitted for the last three years	
		Audited P/L & BALANCE SHEET	P/L & Balance sheet of the last three years	



## **BID A": PART II**

Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart). **Improper filling &/or suppression of facts/false statement will lead to disqualification and penalty in the form of permanent black listing.**

### **(B) Financial Bid B**

**COVER "B":** Separate file containing financial document only.

- (a) Financial Bid: BOQ in INR (in excel sheet)

The folder marked as "Financial Bid" shall contain ALL INCLUSIVE PRICE in INR only and should include base price along with the cost of allied works and services which are to be undertaken (like installation, commissioning of equipment or PC etc.), cost of insurance, packaging, forwarding, delivery charges, clearing charges of the new instrument to be purchased. GST and any other applicable tax. should be quoted separately. Three years CAMC rate (cell no. P13) should also be quoted separately in the template for Bill of Quantities (BOQ) just for reference for future.

**However, the L1 will be determined on basic rate with cost of warranty period ( mentioned in the specification) with five years CMC . GST quoted will be directly remitted to Government account as per existing norms of Finance Department**

**While preparing BOQ ,in basic rate column (cell no M13) ,company should quote basic rate with cost of warranty period that is mentioned in the specification.**

**If warranty period not mentioned in the specification, in that case warranty period will be treated as 01 (one) year only.**

The Tenderers are not required to submit the hard copies of Cover A (Transaction document of EMD , General Documents and Technical Specifications) .

### **6. Evaluation of Tender:**

During tender evaluation process, "Bid A" will be opened first. Those tenderers who would qualify the Statutory & Non-Statutory requirements on the basis of technical and commercial documents will be identified and "Bid B" i.e. financial bid of only those qualified bidders will be opened. Verification of hard copies of the audited balance sheet and Profit & Loss Accounts of the Tenderers for the last three years will be made if deemed necessary before opening the Financial Bid (Bid B) of the technically qualified bidders. If found suitable on the basis of above pre-qualification, the tenderer quoting the lowest rate, will be considered as successful.

### **7. Earnest Money:**

The earnest money of the tenderer is liable to be forfeited if the tenderer withdraws his tender as a whole or for any particular item or items at any stage after opening of the tender or fails/refuses to enter into written agreement for any or all of the items of his accepted bid within the time specified when requested to do so or fails to furnish Performance Bank Guarantee within the stipulated time. **EMD should be deposited online in the Pooling Account of Government of West Bengal maintained at ICICI Bank, RN Mukherjee Road Branch in the manner as prescribed in Government Order no. 3975-F(Y) dated 28/07/2016. (Order copy is available at the site-www.wbfin.nic.in)** Hard copy of Bid A should reach the office on or before the stipulated date as mentioned in clause 23.



**8. Rate:**

The price is to be quoted in INR only including cost of insurance, entry tax, packaging, forwarding, delivery charges, clearing charges and installation of the new instrument. The basic rate should be furnished inclusive of Transportation Cost, Insurance, Testing Charges, Incidental Charges etc. but excluding GST and any other applicable taxes etc. which should be quoted separately in the template for Bill of Quantities (BOQ).

**9. Order & Supply:**

The tendering authority has the liberty to ask for **performance demonstration** of any item during any stage of the tender process, before placing order for supply. In case of dissatisfaction, the authority will have the right to disapprove the offer of L1 bidder and go for the next bidder. Orders for supply of the approved products will be placed with the successful tenderers after execution of agreements and such supply shall have to be made in such installments as may be fixed or spread over the period to be specified in the supply orders to be made in pursuance of the agreements. The equipment is to be transported in such packaging so as to avoid damage to primary package of manufacturer. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

**The tendering authority will be at liberty to enhance the quantity of the item tendered up to 40% of the original required quantity. Bidder will have to consider the same while bidding as supply of the enhanced quantity will be mandatory as the original one.**

**10. Withdrawal /Cancellation & Purchase Policy of Tendering Authority:**

The tendering authority reserves the right to withdraw any item from the tender at any stage. The selection of such item, if already made in favour of any tenderer, shall be treated as cancelled. The tendering authority reserves the right to reject or accept any tender or part thereof at any stage or to split any tender without assigning any reason. Withdrawal of tender or any revision after submission of tender by the tenderer will not be allowed.

Purchase will, however be made following the existing purchase policy of the Govt. of West Bengal and its amendment(s) made from time to time. The purchase policy of the State Government as provided in the West Bengal Financial Rules, the policy of price preference in particular incorporated under Notification No. 10500-F dated 19.11.04, 5400-F(Y) Dated 25/06/2012 and subsequent relevant orders should be observed in considering the tenders.

**11. Important Instruction with regard to Submission of Tender:**

The rate should be quoted in Indian Rupees for a particular brand or model (model no. of the offered item only must be mentioned in the appropriate column of the 'Tender Form'. Alternative offer will not be accepted). The tender shall be cancelled for the quotation of item without its brand name, model, model no. etc. Detail information regarding the manufacturer and the item quoted in the 'Tender Form' should be furnished.

**12. Spare Parts:**

The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipment and the complete system for at least five years on a continuing basis. However, this does not relieve the supplier of any warranty obligations under the contract.



### **13. Guarantee / Warranty Period:**

i) The machine/Instrument should be covered by free on-site comprehensive Warranty for one year after successful installation. The tenderers must quote for 5 (Five) years' comprehensive on-site AMC of entire system (including all spares & labour) after the date of completion of free warranty period. The CAMC charges for 5 years to be quoted in the BOQ, will however be determined on extant Govt. rules in this regard.

ii.) All faults appearing and their rectification shall be periodically advised to the institute, the period being not more than two weeks.

iii.) Any lacuna or lacunae noticed in the functioning of the installation as a result of any design or other feature shall be rectified by the supplier free of cost within 72 hours of call log.

### **14. After Sales Services and Maintenance Contract:**

After sales service must be provided by the supplier, during and after warranty period of the equipment. Selected vendor will remain liable to attract penalty for violation of machine downtime as per agreement. The selected vendor or his authorized servicemen has to attend the machine within 72 hours of Call Log. It is desirable to have a fully equipped service centre in or around Kolkata.

### **15. Delivery, Installation and Commissioning**

i. Delivery of the goods at the purchaser's premises shall be completed by the Supplier in accordance with the terms specified by the purchaser.

ii. The installation, testing and commissioning of the proposed system shall be completed in accordance with the order.

iii. All items are to be delivered within six weeks from the date of placement of order.

iv. In case of distributor, the firm should be direct distributor of manufacturing unit. **Sub distributor authorization by distributor will not be accepted at all.**

### **16. Penalty Clauses:**

**PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRAUDULENT/ MISLEADING DOCUMENTS:** If during the tender process or at any stage during the validity of the tender period, it is found that a tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated. Similar penal measures shall also be initiated against those tenderers who have submitted false/ misleading/ fraudulent documents or made incorrect declarations. The penal measure will be forfeiture of Earnest Money, forfeiture of Performance Bank Guarantee if enlisted as a supplier in addition to any other legal action against the firm.

### **17. Appeal:**

Appeal against the decision of the Principal, Nil Ratan Sircar Medical College, Kolkata and then to impose such a penalty will lie with Tender Selection Committee. Review against the decision of the Tender Selection Committee (TSC) will lie with Health & F.W. Dept. of the Govt. of W.B. The Special Secretary/Secretary/Principal Secretary will be the appellate authority within the Department of Health & Family Welfare, Government of West Bengal. Before imposing any penalty as per clauses 20, 21 and 22 the concerned supplier may appeal to the authority citing the proper reasons for non- imposing the penalty as stated.



**18. Agreement:**

On a tender being accepted, intimation of acceptance will be forwarded to the tenderer by Principal, Nil Ratan Sircar Medical College, Kolkata. After communication of the same, the tenderer will have to execute agreement in the prescribed form with the Principal, Nil Ratan Sircar Medical College, Kolkata. In case any direct purchasing unit wishes to go for a separate agreement, the head of the purchasing unit must get written permission to that effect from his controlling authority. This present document and the tender forms filled in by the tenderer or copies thereof in so far as they are not inconsistent with these terms & conditions will be incorporated as part of the agreement. Such agreement will be binding on the tenderer.

**19. Validity Period of Agreement:**

The contract period will be for a period 01 (one) years from the date of finalization of tender **which can be extended for a further period of 6 months if Tender Selection Committee feels necessary.**

**20. Performance Bank Guarantee:**

The performance bank guarantee will be mandatory for all suppliers and will not be waived in any case. The successful tenderers shall be required to furnish the 'Performance Bank Guarantee' from any Nationalized/Scheduled Bank acceptable to Govt. of West Bengal for One year @ 10% of quoted base rate per item for which the tenderer has been selected as supplier. The performance bank guarantee will have to be renewed after completion of Free Warranty period, for additional 5 (Five) years under the paid CAMC period before transfer of the CAMC amount to bidder's account. Mentioning of West Bengal Government Pooling Account for Performance Bank Guarantee No. 000605030134 IFS Code ICIC0000006 MICR 70229002 at ICICI Bank, RN Mukherjee Road Branch, Kolkata on the body of Performance Bank Guarantee is made mandatory vide Finance Department GO No. 2691-F(Y) dated 02/05/2017.

**21. Inspection:** Before submitting the tender, the intending tenderers should thoroughly get acquainted themselves with the proposed supply and installation by local inspection of site and take into consideration the site condition and other criterion for effecting smooth supply. No claim whatsoever will be entertained afterwards.

**22. Payment Terms:**

Payment will be made electronically by Govt. of West Bengal approved system after execution of due supply and successful installation as ordered, subject to :

- i. Submission of Performance Bank Guarantee in terms of Clause 20 and subject to penalty clause in terms of Clauses 16.
- ii. Supply of the materials as per specification as provided in the tender documents and the catalogue. Supply of the materials must be made within the stipulated period as specified in the work orders.
- iii. On being selected, the successful vendors will have to submit one application to the Principal, Nil Ratan Sircar Medical College, Kolkata stating the name of the payee/recipient, Bank account no with IFS code of the payee/recipient for making e-payment. Payment will only be released after satisfactory installation and verification of following items-

1. Supplier's invoice in original
2. Challan and installation certificate
- 3 Any other thing of importance on the discretion of College Authorities



**23. Dates & Information:**

S. No	Items	Dates
1	Date of uploading of N.I.T. Documents (online) from this end.	13.01.2025, 5.00 P.M.
2	Documents download start date (Online)	13.01.2025, 5.00 P.M.
3	Date of hoisting of documents at Departmental Website ( <a href="http://www.wbhealth.gov.in">www.wbhealth.gov.in</a> )	13.01.2025, 5.00 P.M.
4	Date of Pre Bid Meeting and workshop with the intending bidders at the office of the Principal of NRS Medical College	16.01.2025, at 12.30 P.M
5	Bid Submission starting (On line)	17.01.2025, 4.00 P.M. onwards
6	Bid Submission closing (On line)	01.02.2025 at 4.00 P.M.
7	Bid opening technical bid(online) (Bid A)	03.02.2025 at 4.00 P.M.
8	Date of uploading list for Technically Qualified Bidder (online)(Bid A)	04.02.2025, 10 A.M. onwards.
9	Date & for opening of Financial Proposal (Bid B) (Online)	To be declared later
10	Date of uploading of list of bidders along with the approved rate	To be declared later

Principal, Nil Ratan Sircar Medical College, Kolkata, reserves the right to change the above schedule in case of any exigencies after putting up a notice in the departmental website and Notice Board of N R S Medical College, Kolkata.

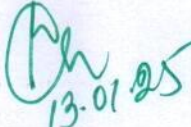


**24. Validity of Tender:**

- i. The tender will remain valid up to 1 (one) year from the date of finalization of tender **which can be extended for a period of 6 months**. Any objection raised by any bidder in this respect will not be entertained. No informal tenderer will be entertained in the bid further.
- ii. During the scrutiny, if it comes to the notice of tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice.
- iii. Prospective bidders must take training from authorized agencies before submission of their bids.
- iv. The Tender Selection Committee reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

**25. NO- CONVICTION CERTIFICATE:**

No conviction certificate in the form of An Affidavit is to be submitted in the prescribed Pro-forma as Annexure-IV attached herewith from Notary Public/ Judicial Magistrate/Executive Magistrate.

  
13-01-25

Principal  
NRS Medical College  
Kolkata-14

A



**CHECK LIST (MUST BE PROPERLY FILLED)**

**NOTE: For Non applicability for some documents please mention "NA" in the check list. Must be mention page number in the check list.**

S. No	Item	PI put tick or NA	Page No.
1	Application submitted in Annexure I		
2	Annexure II (Copy of agreement between the Manufacturer and the Direct Importer/Distributor)		
3	No conviction certificate in the form of an Affidavit as per Annexure-III.		
4	Income Tax Returns submitted for the last three Assessment years		
5	GST Registration certificate(not provisional)		
6	PAN Card of the organization and authorized signatory.		
7	Audited P/L & Balance sheet of last three years		
8	Technical specifications of Instrument (in PDF/Excel format. Must mention Make, Model, exact features of the offered item against each point given in the specification chart).		
9	Trade License in the name of participating firm		
10	Valid Manufacturing License(if applicable)		
11	Import License with validity (for importers)		
12	List of purchaser in Govt. Institutions of repute, for last two years		
13	A declaration in respect of existence of a fully equipped service centre in or around Kolkata in respect of the relevant item.		
14	A Proof of submission of applicable EMD		



**ANNEXURE-I**

**APPLICATION FORMAT**

(To be furnished in the Company's official letter pad with full address and contact no etc)

To The Principal, Nil Ratan Sircar Medical College, Kolkata-700014.

Sub: Tender No.-----Dt.------(Name of the Item -1)-----2)-----

-----3)-----4)-----

---) for purchase and installation of equipment for department of ....., Nil Ratan Sircar Medical College, Kolkata-700014.

Ref:-

Sir,

Having examined the pre-qualification & other documents published in the N.I.T, I /we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me / us on behalf of.....

In the capacity of.....duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.

2. We accept the terms and conditions as laid down in the NIT mentioned above and declare that we shall abide by it for throughout the tender period and its extensions, if any.

3. We are offering rate for the following item /items and assured supply to the Health & Family Welfare Department, Government of West Bengal as per Table-1 (Instrument Specification)

4. a. We propose that the order and bill should be raised in our name.

For liasing, we have appointed M/S ..... having its office at ..... (Address, contact no and e mail address) as C&F agent /Liasoner /Contact person/..... Others (strike out whichever is not applicable) as per clause ..... of the NIT

b. The agreement between ourselves and the distributor/C&F/Liasoner & other documents as prescribed is attached in annexure III

5. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.

6. We understand that:

(a) Tender Selection Committee/ H&FW Dept can amend the scope & value of the contract bid under this project.

(b) Tender Selection Committee/ H&FW Dept reserves the right to reject any application without assigning any reason.

Date :-

Signature of applicant including title  
and capacity in which application is made.

Contact details -

Mobile:

E mail ID:



## **Annexure- II**

- a. Copy of agreement between the Manufacturer and the Direct Importer/Distributor in Annexure -III



### ANNEXURE-III

Draft Affidavit Proforma  
(Notarized on Rs. 100 Stamp Duty)

I, Sri/Smt. ....  
The Managing Director/Proprietor (etc.) of the Firm.  
..... (Name of the firm)  
At (address).....  
P.O. ....  
P.S.....Dist.....  
do hereby solemnly affirm and declare as follows:

- a. That I am not under conviction of any offence making myself liable to be disqualified to supply of Surgical Equipments/Instruments etc. to any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States.
- b. My Firm has not been blacklisted at present as a whole or for any item/ items as quoted in this tender by any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States in India.
- c. That no case is pending against me or against my Firm in any criminal court of law in connection with the supply of Surgical/hospital equipment/Instruments to the Govt. or Govt. undertaking Organization / Institution in the State of West Bengal or other State or States ( If any case is pending, pl state the details ).
- d. *That, I declare that the item or items quoted by me confirms the specification given in the NIT document or higher standard relating to the specification is provided.*
- e. The duly authenticated Technical Data Sheet is uploaded conforming to the prescribed standard.
- f. That, I also declare that if any information subsequently found incorrect or false will it automatically render the tender submitted by me cancelled and make me liable for penal/legal action as per law of the country.
- g. That I do further affirm that the statements made by me in this tender are true to the best of my knowledge and belief and all the documents attached are genuine & correct.

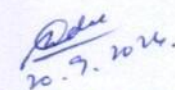
Deponent



# TECHNICAL SPECIFICATION

## Echocardiography Machine

Specification	Specification name	Bid Requirement (Allowed values)
Standard	The system must be latest generation, technologically advanced, digital, color Doppler, 2D Echo Cardiology system for adult and Paediatric and fetal application	Mandatory
	Conformity to Manufacturer Certification	<b>Mandatory certification:</b> a) MII Class I or Class II certificate b) ISO
	The offered model should be USFDA or European CE (4 digit notified body) or BIS approval	Mandatory
	The system must be latest version or model till the date of application for technical bidding.	Mandatory
Types of Probes and Features	Cardiac and Vascular Probes Configuration	ALL
	TEE Probe Type	Adult
	System should have provision of upgradable to TEE probe	Adult and Paediatric
	TTE Paediatric probe frequency , in MHz	3-8 MHz(±1)
	2D Adult Single Crystal Cardiac (TTE) probe frequency in MHz	2-5 MHz(±1)
	2D TEE Adult Probe frequency, in MHz	3-7 MHz(±1)
	Vascular Probe	5-12 MHz(±1)
	System Should have at least 90 degree field of view in cardiac probes	Yes
	System should have Single crystal Matrix probe technology for adult Cardiac transducer, linear phased Array and Curved Phased array Transducers	Yes
	Tissue Harmonic imaging in fetal echo probe for excellent image quality on difficult to image patients	Yes
	System Should have framer rates in excess of 1000 fps and minimum Dynamic range of 250 DB	Yes
	Should have at least five frequencies in Tissue	Yes

  
 20.9.2024.  
**Prof. (Dr.) M. Mandal**  
 MD (Med), DM (Cardio)  
 HOD, Dept. of Cardiology  
 NRS Medical College  
 Kolkata-700 014



Specification	Specification name	Bid Requirement (Allowed values)
	harmonic imaging in all imaging models like B, M, PW, CW and CFM	
	Should be capable of doing Mode in real time/stored images and should have a post processing M mode.	Yes
	System should have B Flow and compound imaging for better resolution	Yes
	System should support Speckle reduction imaging for the uniform image quality across all the probes.	Yes
	Should have an advance Stress Echo package capable of acquiring and display of images at true scanner frame rates	Yes
	Should have a digital Stress Echo package capable of acquiring and display of images at true scanner frames rates with: <ul style="list-style-type: none"> <li>• Both pharmacological and Exercise Stress exam Capabilities</li> <li>• Possibilities to modify and create protocol templates</li> <li>• Image acquisition, reviewing, wall segment scoring and reporting</li> <li>• Possibilities of extensive post-processing of images under review</li> <li>• Zoom capabilities in Stress Echo Review</li> <li>• Should able to use the TVI and Qualification while during the stress.</li> </ul>	Yes
	Number of transducer / probe ports	4
	System should have pre-assessments packages Z-score's in pediatrics	Yes
	Digital Cine Replay, Allowing to store and replay ultrasound images including 2D, Color, Color Anglo, Doppler and the Cine Replay should allow the user to change gain, contrast, sweep speed, base line etc image parameters	Yes
	An offline workstation with similar capabilities as in- on – board, analysis and quantification data sets should be available for later use on PC.	Yes
	Offline workstation must have automated Function imaging (RV, LV, LA) Cardiac Auto Doppler, bull's eye report, LVO Contrast, tissue Synchronization image Mode, Wall Motion Scoring	Yes
	Should have capable of calculating Ejecting	Yes



Specification	Specification name	Bid Requirement (Allowed values)
	fraction in automatic mode.	
	System must have more than 9,00,000/ 9 Lac digital processing mode.	Yes
	Diacom three point zero compliant	Yes
	Should have high end touch panel of at least 10 inches for easy user interface.	Yes
	Monitor display size, cm(in)	21 inch(±1), High resolution, Flat panel
	Should have a display of single, dual or quad images side by side	Yes
	Speckle-tracking strain and strain rate	Yes
	Analysis and Calculation package	2-D wall motion tracking, Cardiac, Mitral valve analysis, user programmable calculations
	Should have built-in CD/DVD Writer for directly writing images on CD/DVD	Yes
	Type of printer provided with the echo cardiac machine	Thermal Printer
	ECG Cable	1
	Should have an integrated hard drive of at least 500GB	Yes
	System should support USB port for storing the images on Pen Drive	Yes
	Software-driven system with raw data storage and advanced post-processing capabilities.	Yes
	System Should have digital image Storage and Patient Archive with true scanner frame rates. When recall the images should able to reanalyze the images with Full Measurement and Analysis capabilities	Yes
Power Requirement	There should be a System integrated keyboard for easy patient data, annotation and report entries.	Yes
	Resettable over current breaker shall be fitted for protection	Preferable
	Power back up	UPS
Miscellaneous Parameters	Warranty	2 years
	Number of installation of the cardiogram machines in Central/State/PSU govt. Hospitals (Note: Seller should supply to the buyer if demanded after placement of order)	At least 3 numbers of the same quoted model.
	<b>Cardiac calculations packages (offline workstation and / or on the system):</b> • Strain and Strain rate imaging	Mandatory



Specification	Specification name	Bid Requirement (Allowed values)
Additional Parameters	<ul style="list-style-type: none"> <li>• 2D speckle tracking</li> <li>• Semi-Automated Border Detection</li> </ul> <p>Cardiac analysis : Left atrium, Right atrium, right ventricle , Left ventricle, TAVI (Transcatheter aortic valve implantation), Valve stenosis Prosthetic aortic valve, mitral valve TAPSE (tricuspid annular plane systolic excursion), PCWP (pulmonary capillary wedge pressure or pulmonary artery occlusion pressure), Volume by area/length method, M-mode ejective fraction Simpson's biplane and single plane volume and ejection fraction.</p> <p>Cardiac Quantification Tool:</p> <ul style="list-style-type: none"> <li>• Left ventricle and left atria global volume analysis from 2D and biplane images</li> <li>• Automated border detection for cardiac chambers vessels cavities</li> <li>• Computation of area, LV volume and advances parameters for LV systolic and diastolic function including fractional area change (FAC), ejection fraction (EF), peak ejection rate (PER), peak rapid filling rate (PRFR) and atrial filling fraction(AFF)</li> <li>• Computation of LA area, volumes and advanced parameter including area change (FAC) and ejection fraction(EF)</li> <li>• Automated 2D longitudinal strain quantification Objective assessment of left ventricle global function and regional wall motion deformation and timing using 2D speckle tracking technology.</li> <li>• One-button-push global longitudinal strain</li> <li>• Automated view recognition and labeling with manual correction</li> <li>• Peak longitudinal strain for each apical view and global average. 18 segments peak-systolic longitudinal strain bull's-eye display</li> </ul> <p>18 segments end-systolic longitudinal strain bull's eye display.</p>	

*Handwritten signature*  
20.7.24

**Prof. (Dr.) M. Mandal**  
MD (Med), DM (Cardio)  
HOD, Dept. of Cardiology  
NRS Medical College  
Kolkata-700 014



Specification	Specification name	Bid Requirement (Allowed values)
	18 segments time-to-peak longitudinal strain bull's eye display  18 segments waveform display for three apical view.	
	System should have option for Audit and Pediatric 2D TEE application separately.	Mandatory
	System should be upgradable to AI enabled features in single click 2D strain, single click Auto EF, 2D & Doppler Tracking & measurements	Mandatory
	During Warranty and CMC period free software update if available.	Mandatory

*M. Mandal*  
20.9.24

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