

BRIHANMUMBAI MUNICIPAL CORPORATION OF GREATER MUMBAI

TNMC & BYL Nair Ch. Hospital, Mumbai- 400 008.

Expression Of Interest.

Subject- To invite Expression of Interest from vendors to supply 12 Channel ECG Machines (3 Nos.) for the use in Department of Medicine, TNMC & BYL Nair Ch. Hospital through CSR fund received in PPF of BYL Nair Hospital from Mazgaon Dock Shipbuilders Limited (MDL).

TNMC & BYL Nair Ch. Hospital is a tertiary referral center with 1623 beds. Being a major hospital in South Mumbai, a lot of critically ill patients are brought to this hospital. All of these patients need ECG for diagnosis and management. For this, we propose to procure ECG machines in this Department, TNMC & BYL Nair Ch. Hospital. The machines will also be useful in training of Resident doctors.

For procurement of ECG machines, it is proposed to invite "Expression Of Interest" from potential vendors to supply the same for patients coming to EMS/MICU/Medical wards of this hospital.

To supply required ECG machines, vendors should obtain **Application Form** from **Dean Office on 23.09.2024 to 30.09.2024** and submit all required documents on or before **30.09.2024**, up to 1.00 pm in the drop box in Dean Office, College building, Ground floor of T.N.M.C. & B.Y.L. Nair Ch. Hospital. This will be a 2 stage EOI comprising of 2 packets; Packet A - relevant documents related to the technical specifications along with the duly filled Application form AND Packet B- Commercial documents (quotation in the prescribed format). **Packet A will be opened on 01.10.2024 & packet B will be opened on 07.10.2024** in the Dean's Office.

**SPECIFICATIONS FOR ECG MACHINE FOR DEPARTMENT OF MEDICINE,
TNMC & BYL NAIR CH. HOSPITAL, MUMBAI CENTRAL, MUMBAI.**

Specifications of ECG Machine:-

1. It should be compact in size, easy and direct operation, portable.
2. It should be accurate with pace, pulse identification and automatic analysis function
3. Four working modes: Manual/Auto/Physical Examination/Storage
4. It should have 12 leads simultaneous waveforms acquisition & display
5. It should be 800x480 graphic 7-inch color screen with Alphabet keyboard for input
6. 215, 12 channel format recording A4 or 210 mm
7. It should have Built-in USB, Adapt to 1, 10-230V, 50/60Hz AC power supply
8. Built-in rechargeable Li-on Battery
9. 200 patient's information storage (Extendable)
10. USB interface allows net transmission, USB flash disk and USB printer connected *High accuracy thermal printing, adapt to 215mm roll paper and 210 x 140 mm.
11. A4 size ECG paper/rolls
12. Technical Specification (Brochures)
13. Lead - Standard 12 Leads
14. Lead acquisition - 12 bit/1000Hz (synchronously 12 leads)
15. Work mode - Manual/Auto/4000Hz
16. Filter – AC filter: 50HZ/60Hz
17. EMG Filter: 25Hz/45Hz
18. Anti-Drift Filter: 0.15 Hz (adaptive)
19. CMMR > 1000dB (with AC Filter)
20. Input Circuit Floating : Protection circuit against
21. Should be compatible with Defibrillator effect
22. Input impedance >50 M Ω
23. Input circuit Current <0.05 μ A
24. Patient Current Leakage <10 μ A
25. Calibrating Voltage 1m V+2%
26. Voltage constant >+500mV
27. Time constant >3.2s

28. Frequency response 0.05-160Hz (-3db) 250Hz
29. Noise Level <15μ V p-p
30. Inter-channel Interference <0.5mm
31. Sensitivity Auto, 5.2, 5, 10, 20 40mm/mv
32. Recording mode 3ch+++6ch, 6ch+, 12ch
33. Default Man, mode is 3ch++format
34. Default Auto: Mode is 12 ch format
35. Paper Speed 6.25, 12.5, 25, 50 mm/s (+3%)
36. 210mm x 20 mm roll paper or 210 mm x 140 mm A4 size paper with each machine (20 Nos with each machine)
37. Paper Z-fold paper
38. Communication USB port
39. Power supply AC 110-230V (+10%), 20/60Hz(+1Hz), 60VA
40. DC Built-in rechargeable battery, 14.1 V (4400mAh)
41. 100 ECG in single charge should be CE (NB) or USAFDA approved product.

General Conditions :-

1. All the above equipments shall be new and manufactured from virgin materials. **All the requirements of this supply shall be necessary sourced from the original equipment manufacturer of the model quoted except UPS, Printer which shall not be necessary sourced from the original equipment manufacturer of the model quoted but should be compatible with the quoted model.** In case the machine is imported one no import substitution is permitted neither before the award nor after the award for any part or accessory. “Third party inspection certificate should be applied from the port of origin of shipping of equipment (from the parent companies country of origin).
2. Equipment shall operate on 230V + 15%,, single phase, 50 Hz + 3%, electric supply. The necessary protective relaying / circuitry shall be there with the machines. The mains supply voltage variation may be max.±10% and frequency variation maximum ±3 %.
3. The quoted model shall be CE mark from European Conformity (EC) notified bodies **(under MDD) along with declaration of conformity issued from European address or valid US FDA approval for the offered model and accessories** along with documentary evidence to that effect shall be uploaded.

- a) **Declaration of conformity by manufacturer or EU representative of manufacturer for the quoted model.**
 - b) **Documentary evidence regarding firm registered with EEA (European Economic Area) Competent authority is required.**
Or European Representative registered with EEA (European Economic Area) Competent authority is required.
Or other documents like certificate from notified body along with declaration of conformity.
4. The equipments shall be having Warranty of 3 years. The Warranty and CMC shall cover all the spare parts for total 8 years (**Warranty 3 years and CMC 5 years**). The manufacturer shall supply of spares, consumables along with technical support for at least 2 years after the contract period of 8 years is over. Commercial bid will be inclusive of warranty and CMC (**warranty 3 years and CMC 5 years**).
 5. The equipments should be provided with one hard copy in original of the detailed service manual and operation manual. Further, a soft copy is also required.
 6. The equipment must be tropicalized as below:
 - Operating room temperature: 40° C
 - Storage room temperature: 60° C
 - Relative Humidity: up to 90% Non-condensing.
 7. Prospective tenderers should have a full-fledged and well-established service centre in Mumbai with engineers qualified in servicing of entire ECG Machine. Please provide details of the same in Annexure – 1.
 8. Demonstration of quoted model is compulsory.
 9. Service training to MEC engineers and operational training to user department.

The Installation Report & necessary documents will be submitted to the Donor The Donor will deposit the Payment in Nair Poor Patient fund (PPF). Vendor will be by Nair PPF after receiving payment from donor. for doubts or any query you can contact at the Dean's office /Department of medicine - Tel. No. 02223027125/02223027101/7122

Sd/-

**Professor & Head,
Medicine Department,
TNMC & BYL Nair Ch. Hospital,
Mumbai Central, Mumbai 400 008.**

Sd/-

**Dr. Anjali Parande,
Head of Social Service Dept.,
TNMC & BYL Nair Ch. Hospital.
Mumbai Central, Mumbai 400008.**

Sd/-

**Administrative Officer
TNMC & BYL Nair Ch Hospital,
Mumbai Central, Mumbai 400 008.**

Sd/-

**Dy. Dean
TNMC & BYL Nair Ch Hospital,
Mumbai Central, Mumbai 400 008.**

Sd/-

**Dean,
TNMC & BYL Nair Ch Hospital,
Mumbai Central, Mumbai 400 008.**