

**TENDER SPECIFICATION OF BED SIDE CARDIAC MONITOR**  
**BNS PATENGA & UPASHAM**

1. **Name of Equipment:** BED SIDE CARDIAC MONITOR.
2. **Purpose:** To be used in ICU Department.
3. **Quantity:** 02 (Two) complete sets.
4. **Make /Model:** To be mentioned.
5. **Brand:** To be mentioned.
6. **Name of Manufacturer:** Name and full address of manufacturer is to be mentioned.
7. **Country of Origin:** USA/ Canada/ UK/ EU/ Japan/ Australia/ South Korea.
8. **Manufacturing Country:** USA/ Canada/ UK/ EU/ Japan/ Australia/ South Korea..
9. **Port of shipment:** To be mentioned.
10. **Qualification of Bidders:** Bidders must be enlisted in NSSD Dhaka.
11. **Year of Manufacture.** From 2021 to 2023.
12. **Source of Supply:** Bidders/Suppliers are to be mentioned the name, address and contact details of original source from where goods would be imported. Any software required for installation or proper operation of the equipment is to be provided with original CD.
13. **Price without import duties:** Quoted price is to excluded all import duties as those will be consigned against BN.
14. **Ambient Condition:** The **Bed Side Cardiac Monitor** will be operated and maintained in the following ambient conditions:

a	Ambient air temperature	5°C - 45°C
b	Relative humidity	Up to 95%

15. **Scope of Supply:** 02 (Two) complete sets of **Bed Side Cardiac Monitor** will have to be supplied with all attachments, accessories etc and complete in all respect for immediate operation.

16. **Technical features /facilities**

a. **General :**

Color Display : 10.2" TFT or more , 800 x 600 or more

Waveforms : ECG, SPO2, TEMP, RESP, NIBP

Sweep Speed : 12.5, 25, 50 mm/sec

Operation method: Rotary knob & membrane.

b. **Respiration:**

Method: Impedance

Base resistance: 250-1250 Ohm

Breath rate range: 6-150bpm

c. **Temperature:**

Range: 0-50°C

Accuracy: ±0.2°C

**d. Alarm:**

Source: Error message, all other parameter limits

Alarm On/Off: Selectable for all parameters

Lead fault alarm: Auditory and visual

Alert: Blinking on display, volume selectable audio alarms, Light indicator.

**e. Arrhythmia Analysis:**

Method: Real time arrhythmia detection with innovative feature.

Memory: Capability of storing the latest 80 ARR events (Waveform and parameters)

**f. ST Analysis:**

Display resolution: 0.01mV

Measurement range: -2mV to -2mV

Alarm range: -2mV to -2mV

Features: User adjustable Isoelectric and ST point Trending of ST values.

Update period: 5 sec.

**g. ECG:**

Leads: 12 Leads

Dynamic range:  $\pm 5$ mV

Lead off current:  $< 90$ nA

Calibration: 1mV, 0.5 sec

Filters: Monitor (0.5-28Hz)

Normal (0.5-40Hz)

Extended (0.05-100Hz)

QRS detection: Duration: 40-120 msec

Amplitude: 0.5mV for Adult

0.2-5 mV for Neonate

Heart rate range: 15-300 bpm Adult

15-350 bpm Pediatrics

Pace Detection: Duration 0.1-2msec

Amp:  $\pm 2$  to  $\pm 700$ mV

Protection: Defibrillator and electro surgery.

**h. SPO2:**

Method: 2 wave length pulse wave type

Range: 0% to 100%

Pulse rate range: 25-250 bpm

**j. NIBP:**

Measurement method: Oscillometric

Measurement mode: Manual/Automatic (Intervals between 1 min-24 hours)/ STAT

Time: 18-26 sec

Range: SYS: 25-250mmHg

DIA: 10-220mmHg

MAP: 15-250mmHg

Pressure transducer accuracy:  $\pm 3$  mmHg full range.

17. **Standard Accessories:** Must include all items and accessories with Brand, Model and Country of Origin including following which are required for installation and operation the **Bed Side Cardiac Monitor** whether those are mentioned in the specification or not. A list of such items/accessories is to be provided with the quotation indicating item wise price separately.
18. **Local Training:** The supplier will arrange following training at **BNS PATENGA & UPASHAM** free of cost:
- Operational Training: 02 x Operator for 01 week.
  - Repair/Maintenance Training: 02 x EM Tech (01x Navy & 01x Civ) for 01 week.
19. **Publication:** Following brochure/catalogue in English language showing detailed particulars of the quoted items should supplied along with the offer.
- Operation manual – 03 copies (1 x Original & 2 x Photocopies).
  - Repair/maintenance/service manual including detail circuit/schematic diagram-03 copies (1x Original & 2 Photocopies).
  - Parts Catalogue/Master Parts list – 03 copies (1x Original & 2 Photocopies).
20. **Spare Parts:** Adequate number of fast moving spare parts and other recommended spare parts required for 5 years operation are to be quoted indicating item wise price from which buyer will select as per requirement. The supplier should provide guarantee for supplying spare parts for a minimum period of 10 years.
21. **After Sales Service:** The supplier should have requisite after sales service facilities at home to render necessary services as and when required by BN. Necessary agreement will be signed if required. Details of workshop facilities of the supplier should mentioned.
22. **Test, Trial and Acceptance:** The supplier will carry out installation, test and trial of the supplied machine at his own cost. The acceptance of the supplied items will be carried out by **BNS PATENGA & UPASHAM** where the supplier's representative will be present. After the satisfactory test/trial, with certificate the acceptance certificate will be given by the **CINS NSD Chattogram & ACINS (Khulna)**.
23. **Warranty/Guarantee:**
- The supplier must ensure that all items are new and unused. The supplier must provide warranty at least for 02 (two) years from the date of acceptance of the items after satisfactory inspection, test, trial etc as applicable. If any defect/discrepancy of any item arise within the period of warranty, the specific period from the date of notification of the defect/ discrepancy to the supplier upto the date of rectification of defect/resolve of discrepancy will have to be deducted from the warranty period for that particular items.
  - If any defect/discrepancy arises, within warranty period, then the respective items is/are to be replaced free of cost including freight within 03 (three) months from the date of notification of the same to the supplier. In this regard, the supplier must furnish an undertaking with the offer by stating, "I do hereby assure that we take the liability to replace all spare parts/items free of cost including freight within three months from the date of notification about the defect/discrepancy of the spare parts/items by the buyer, if it occurs within the period of warranty".
24. **Delivery:** The supplied items are to be delivered within 03 (three) months from the date of signing contract to **The Commanding Officer NSD Chittagong and OIC NSD Khulna**.
25. **Validity of Offer:** Up to 30 June 2024.
26. **Certificate/Document of Authentication:** The local supplier must provide following original certificates/documents with the offer/quotation to ascertain the genuinity of source and items in order to establish chain of links from the original source of supply items:
- One certificate/document by the manufacture in favour of the supplier (in case of manufacture as direct source (Original)
  - FDA/CE Certificate /JIS must be submitted


- c. Manufacture Authorization Certification for the specific tender (Original).
- d. Trained Bio Medical Engineer list with update CV.

27. **Users List:** User List in Bangladesh with contract details along with user's certificate of the quoted machine is to be provided along with the offer.

28. **Terms of Payment:** 100% payment will be made after satisfactory test, trial and acceptance by BN in local currency.

29. **Condition for Acceptance of Quotation:** Quotation has to have supporting documents (booklets, leaflet, catalogue, brochure etc) having detailed particulars of the offered **Bed Side Cardiac Monitor**. The quotation will not be accepted if detailed information regarding specifications, maker's books and catalogue about the same model of the machine quoted, list of spare parts and accessories, etc are not provided.

30. **Compliance statement:** A compliance statement fulfilling all requirements of the tender is to be submitted for evaluation of the quotations, Stating mere 'Yes' or 'No' will not suffice and detailed description/ information's as required are to be given. An incompliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with the offered item, the deviation has to be spelt out clearly.


  
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