



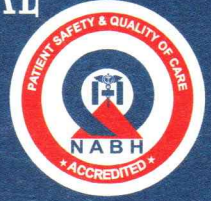
EMS MEMORIAL CO-OPERATIVE HOSPITAL & RESEARCH CENTRE, PERINTHALMANNA

NABH Accredited and ISO 9001-2015 Certified Multi Super Speciality Hospital

P.B. No. 25, PERINTALMANNA - 679 322.

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QUOTATION NOTICE FOR PURCHASE OF MEDICAL EQUIPMENT

EMCH / QTN / GEN / 05 / 2026

15th June 2026

Sealed quotations are invited from reputed manufactures / authorised supplies / dealers for the supply & installation of Bipap Ventilator, Dialysis Machine, Harmonic Cautery machine for CVTS

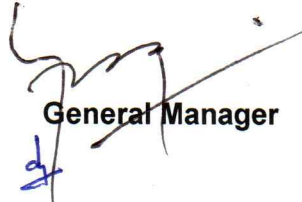
Technical specifications of the equipment can be obtained from www.emshospital.org.in/about/tender

Quotations should be in Two sealed covers

- First cover super scribed "Technical cover" should include technical specifications, list of installations authorization for the supply, safety certificates etc.
- Second cover super scribed "Commercial cover " should include commercial terms such as Price, Warranty items, tax if any, AMC/ CMC details for next 5 years, cost of consumable / spare parts / consumable regularly required etc.
- Technical quotation will be scrutinized by a technical committee.
- Technically qualified quotations will only be considered for opening of Commercial quotations.
- The quotationers should submit their authorization for supply of the quoted items from the Manufacturer

Sealed quotations addressed to The General Manager, EMS Memorial Co-operative Hospital, Perinthalmanna should reach the Administrative Office of the hospital on or before **25th June 2026**.




General Manager

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HARMONIC CAURTERY UNIT

MAKE : Please specify

Model : Please specify

Manufacturing country : Please specify

Year of Launch : Please specify

1. System should have a universal connector to connect Ultrasonic energy and Advanced RF energy instruments
2. System should have automatic instrument recognition
3. System should have a touch screen display for fast and setup, operation and on-screen diagnostics
4. System should have a high-resolution display with wide viewing angels.
5. System should have the ability for software updates via USB memory stick.
6. System should be a single generator that provides Ultrasonic energy and advanced RF energy technology for soft dissection and vessel sealing
7. System should have potential equalization terminal for compatibility with other medical systems requiring such connections
8. System should conform to the following international standards EN (IEC) 60601-1, EN (IEC) 60601-1-2, EN (IEC) 60601-2-2
9. EN (IEC) 60601-1-8
10. System should provide Class 1 protection against electric shock
11. System should have a single footswitch for operating ultrasonic energy or advanced RF energy instruments
12. System should have the ability to select hand switch or footswitch activation or both for Ultrasonic and advanced RF energy Instruments and the ability to change selection during use.
13. System should have 6 international language options with English language as default.
14. System should not have minimal lateral thermal spread more than 1 mm
15. System should not have an auto switch off mechanism
16. System should have standby mode to ensure safety

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17. System should come equipped with system diagnostics and troubleshooting guide to pinpoint any problems in the dem
18. System should have onscreen warning display system for generator overheating, generator software upgrade, hand sce errors & instrument eTTORS
19. System should be able to power ultrasonic energy instruments with 55.5 KHz frequency and have the ability to power ultrasonic energy instruments in the frequency range of 30-80KHz in future
20. System should be compatible for open surgery and for laparoscopic surgery
21. System should be compatible with both 5mm and 10mm instruments
22. System should have at least 5 power settings levels with power level display for ultrasonic energy instruments
23. System should be able to power energy instruments with microprocessor controlled bipolar electrosurgical radiofrequency technology with a quasi sinusoidal forced impedance output.
24. System should be equipped with smart advanced RF energy technology to measure the tissue impedance and control the power delivery
25. System should be equipped with advanced RF energy technology that can simultaneously seal and transect vessels up to including 7mm, large tissue pedicles and vascular bundles
26. System should be equipped with advanced RF energy technology that provides temperature controlled energy delivery which should maintain tissue temperature approximately at 100 degree Celsius.
27. System should have advanced RF energy hand instruments with a unique electrode configuration to minimize the lateral thermal spread
28. System should have Advanced RF energy hand instruments with technology to deliver high compression uniformly across seal area
29. System should have advanced RF Energy hand instruments that provide tiber vessel seal strength in withstand ursting pressure of 7 umes the systolic pressure
30. All hand probes for open and lap procedures should be able to simultaneously cut and coagulate issues.
31. System should be able to power advanced RF energy hand instruments of Smm shaft diameter for both open & Laparoscopic procedures in the following shaft length (14cm, 25cm, 35cm & 45cm) and should be both hand & foot activated

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32. System should be able to power ultrasonic energy hand instruments of 5mm shaft diameter for both open & Laparoscopic procedare and should be both hand and foot activated, with the following specifications

- a. Pistol grip Curved Coagulation Shears with ergonomic handle in the following shaft length (36cm), Can seal blood vessels upto and including 5mm in diameter and should have adaptive tissue technology,
- b. Pistol gap curved coagulation shear with ergonomic handle with 23 cm with 360 degree rotation.
- c. Curved blade and hook having telescopic shaft 4-9cm
- d. Coagulation shears with scissors grip of 9cm and 17cm lengsh
- e. RF Vessel sealing Probe which can coagulare up to 7mm vessel in diameter with Shaft length 35 CM Long.
 - i. RF Wessels Sealing Probe with 110 Articulation (55 in each direction), 360 rotation knob
 - ii. Articulation wheel-to help lock in desired angle of approach

33. System should comprise of the following

A Hardware

- i. Geoeran
- ii. Footswitch & cable.

A. Accessories to be supplied if orders issued - Rate to be quoted separately

- a. Hand piece (Transducer)
- b. Adaptors for ultrasonic and advanced RF energy instruments
- c. Harmonic lap probe
- d. Pistol grip curved coagulation shears with ergonomic handle 36cm
- e. Advanced RF Energy hand instruments of 5mm shaft diameter 35 cm
- f. Scissor grip coagulation shears 18cm
- g. Advanced RF Energy hand instruments of 5mm shaft diameter 25 cm
- h. Harmonic Synergy probe or equivalent

Please refer to COMMON TERMS & CONDITIONS in page 9

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HEMODIALYSIS MACHINE

1. Facility for both Acetate and Bicarbonate Dialysis
2. Facility for sodium profiling, ultra filtration profiling, online clearance monitoring or equivalent technology and Bicarbonate profiling.
3. Facility for bicarbonate dry concentrate.
4. Automated disinfection and cleaning programs.
5. Twin Microprocessors for safety monitoring and operation of machine.
6. Facility for Rinse, Hot Rinse and Hot disinfection with fixed time limit..
7. Facility for upgradation in future.
8. Facility for different dialysate flow range 300 to 800 ml/min
9. Dialysate temperature 35-39 centigrade.
10. Dialysate mixing ratio (default) 1:1.83:34 and 1:34
- 11 Volumetric Ultra filtration
12. Ultra filtration rate 0-4 litre /h with accuracy $\pm 1\%$
13. Parameter display - ultra filtration goal, UF time, UF rate and UF volume.
14. Facility for arterial, venous, transmembrane pressure monitoring.
15. Arterial pressure monitoring range (-300) to +300 mm Hg, Accuracy ± 10 mm of Hg.
16. Facility for Arterial blood pump flow range 50-600 ml/min, Accuracy $\pm 10\%$
17. Heparin pump delivery range 0-10 ml/hr with syringe size 20-50ml.
18. Facility for Air and blood leak detector.
19. Blood leak detector sensitivity less than or equal to 0.5 ml/min.
20. Facility for dialysis fluid conductivity range 12.8-15.7 mS/cm.
21. Heat disinfection 85% chemical disinfection at 85 degree centigrade.
22. Water inlet pressure 1.5-6 Bar
23. Water inlet temperature 5-30 degree centigrade.

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24. Optional quote has to be offered for connecting the machine to network if the feature is available. Network connectivity (cabling) and PC will be provided by the tender inviting authority/user institution. (Rate quoted will not be taken for evaluation.) All other hardware and software required to connect the machines to the network shall be provided by the bidder and should have the following features. a. Patient details including ID no, name, age etc. b. Dialysis details including all dialysis parameters including set values and real time values and adequacy of dialysis simultaneously from any number of dialysis centres across Kerala. c. Customised report of dialysis

25. Shall be able to view all other parameters centrally

26. Should have minimum 15-30 minutes battery backup for safety monitors and blood pump.

27. Should operate on mains 220-240Vac, 50 Hz single phase.

28. Should have safety certificate from a competent authority CE issued by a notified body registered in the European commission/FDA (US)/ STQC CB Certificate/ STQC S Certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate/test report shall be produced along with the technical bid

29. The equipment should have rodent and insect proof design or the warranty shall cover all defects arising due to rodents and insects

Please refer to COMMON TERMS & CONDITIONS in page 9

**EMS MEMORIAL CO-OPERATIVE HOSPITAL & RESEARCH CENTRE
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BIPAP VENTILATOR

1. NIV for adults and pediatrics.
2. Light weight, small, user friendly and quiet device.
3. Should have the following modes. S -T (spontaneous - timed), CPAP (Spontaneous), T (Timed), PAC (Pressure Assisted Control)/ PC (Pressure Control), Volume Assured Pressure Support (VAPS).
4. Should incorporate latest algorithms for leak compensation and synchronization.
5. Should have color screen at least 3.5 inch for real time monitoring of minute volume/ tidal volume, respiratory rate, percentage of leak, I:E ratio, Delivered IPAP and EPAP.
6. Should be able to display real time flow and pressure curves / values simultaneously and the Ti bar graph.
7. Should include user adjustable alarms and essential nonadjustable fixed alarms for patient safety.
8. Should include alarms for leak, power supply failure, apnea, patient circuit disconnection, occlusion, low internal battery etc. and should have adjustable alarms for minute volume, high/low pressure, RR, apnea.
9. Should have oxygen port to accept flow up to 15 l/min of oxygen to achieve a high FiO₂.
10. Should provide and maintain optimal humidification at patient desired temperature regardless of ambient humidity changes throughout night.
11. Pressure range: IPAP- 4/ 2-40 cm H₂O, EPAP-2/4-20cm H₂O.
12. Pressure support 0-30cmH₂O.
13. Respiratory rate 5-40bpm or more.
14. Rise time upto 600msec.
15. Inspiratory time upto 3 sec or more.
16. Flow/ auto trigger and cycle settings.
17. Air outlet should be 22mm taper compatible with ISO 5356-1:2004.
18. Machine should be fitted with electrostatic fibre mesh air filter.
19. Should have built in internal battery for minimum 2 hrs of back up and should have capability to add optional external battery.

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20. NIV ventilator to be supplied with patient ckt 2nos, air inlet filters, power supply pack, reusable face mask standard 3 sizes (Small, medium and Large) 2 pieces each, Oxygen connector, Fio2 Monitoring accessories.

21. Power supply input 100-240v ac.

22. Should have safety certificate from a competent authority CE issued by a notified body registered in European commission / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.

23. Standard Warranty 2 years

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COMMON TERMS & CONDITIONS

The Models quoted must be latest and most advanced and spare and service must be available for at least 10 years which means company will be responsible for maintaining the equipment all 10 years in full working conditions at least 95 % Up time.

- AMC and CAMC Rate should be quoted in price bid for 8 years
- Standard warranty: 2 years
- In case of failure of Equipment , standby arrangements must be provided within 48 Hours .
- Should have safety certificate from a competent authority CE issued by a notified body registered in the European commission / FDA (US)/ STQC CB Certificate/ STQC S Certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate/ test report shall be produced along with the technical bid.

Please attach a copy of

- CE & FDA certificate if any
- Compliance statement with technical specification
- Product datasheet
- Details of service division
- Sales authorization letter from Manufacturer.
- Details of installations
- Company representative should counter sign the purchase order confirming the terms and conditions in the purchase order.

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