



ACU/PS/PV-AHRC/Tender/ ೨೩೮ /2020-21

Date: 09.03.2021

TENDER NOTIFICATION

Adichunchanagiri University is inviting **closed tenders** for the supply of paediatric ventilators for the paediatric Department of Adichunchanagiri Hospital and Research Centre from the competitive firms.

1	Name of the work	Supply of paediatric ventilators for the Paediatric Department of AHRC.
2	Tender documents available for download	09-03-2021 to 19-03-2021 up to 5:00 PM

Sl. No.	Name of the Equipment/Instrument	Quantity (in No's)
1.	Paediatric ventilator	1

Note: Kindly send quotes in 2 bid formats (Technical and Financial bids sealed separately inside the main envelope for individual items) to be addressed to "The Registrar, Adichunchanagiri University, B.G. Nagara -571448, Nagamangala (T), Mandya (D)".

- Adichunchanagiri University reserves all the rights to accept, reject, incorporate changes and re-tender without giving any reasons.
- The sealed cover must be duly superscripted with the name of the equipment along with the words "ACU/AHRC/Closed Tender/Ref no./Paediatric ventilator".
- Attach Brochure, Certification of the product, Bank/account details, PAN and GSTIN.
Kindly mention the details of the contact person on the envelope

Dr. C.K. Subbaraya
Registrar
Adichunchanagiri University
B.G.Nagara-571448

Technical Specifications

PEDIATRIC VENTILATOR	
Technical characteristics (specific to this type of device)	
1.	Should have facility for Invasive and Non-Invasive ventilation.
2.	Microprocessor Control suitable for Pediatric ventilation;
3.	Should have modes of ventilation equipped with newer modes of ventilation: 3.1) Assist/ Control 3.2) Volume control 3.3) Pressure control 3.4) Pressure support 3.5) SIMV with pressure support (Pressure and volume control) 3.6) PEEP 3.7) Inverse ratio Ventilation 3.8) Non-invasive ventilation-BIPAP, CPAP 3.9) Apnea ventilation, user selectable, volume & pressure control;
4.	Should have built in colour screen TFT/LCD display of minimum 8'' (inch) for display of waveforms and monitored value;
5.	Should have inbuilt facility to upgrade with EtcO ₂ .
6.	Should have facility to measure and display of the following parameters: 6.1) Airway Pressure (Peak & Mean) 6.2) Tidal volume (Inspired & Expired) 6.3) Minute volume (Inspired & Expired) 6.4) Respiratory mechanics 6.5) Spontaneous Minute Volume 6.6) Total Frequency 6.7) FiO ₂ dynamic 6.8) Intrinsic PEEP 6.9) Plateau Pressure 6.10)Resistance & Compliance 6.11)Use selector Alarms for all measured & monitored parameters 6.12)Occlusion Pressure 6.13)Pressure Flow & Volume curves;
7.	Automatic compliance and leakage compensation for circuit and ET tube;
8.	Should have facility of log book, for events and alarms with date & time;





9.	Should have following setting; <ul style="list-style-type: none">• Tidal volume (Minimum 10ml, Maximum up to 1500ml); pre-set range for paediatric modes to be provided• Inspiratory pressure (up to 60cm of H₂O)• Respiratory rate 1 to 80 bpm• Apnea back up rate• CPAP/PEEP• Pressure support• FiO₂ setting range between 21% and 100%• Pause time• Pressure/flow Trigger; 9.10)Inspiratory flow up to 120 Lpm;
10.	central pipeline connector (to be supplied along with the machines) should be compatible with ventilator;
11.	Disposable Heat Moisture Exchanger, Qty 10 to be supplied with the unit.
12.	User's interface: Manual and Automatic.
13.	Software and/or standard of communication(where ever required) : Inbuilt software;
Physical Characteristics.	
14.	Weight (lbs, kg) : <50kg including trolley.
15.	Configuration : <ul style="list-style-type: none">• Compatible hanged arm for holding the circuits• Should have caster with braking system;
17.	ENERGY SOURCE (electricity, UPS)
18.	Power Requirements: Input voltage 220 VAC, 50Hz;
19.	Battery operated: <ul style="list-style-type: none">• Battery powered alarm for power failure.• Battery charger to be integral to mains power supply, and to charge battery during mains power operation of unit.• Internal, replaceable, rechargeable battery allows operation for at least four hour in the event of power failure.
20.	Tolerance (to variations, shutdowns): Voltage corrector / stabilizer to allow operation at $\pm 10\%$ of 220V AC. Use of SMPS to correct voltage.
21.	Protection: <ul style="list-style-type: none">• Electrical protection, resettable over current breakers or replaceable fuses (fitted in both live and neutral lines)• Leakage.
22.	Power consumption: To be declared by the supplier.

Accessories, Spare Parts.

23. Accessories & Spares :
- Full face mask pedantries - 5 Nos each of 0,1 and 3
 - Nasal cannula for pedantries /neonates- 5 no's
 - Reusable breathing circuit of silicone material (2Nos) Disposable breathing circuit (10No.s)
 - Air & oxygen hose- 1 each
 - Servo controlled Humidifier-1

Environmental And Departmental Considerations.

24. Atmosphere / Ambiance (air conditioning, humidity, dust ...) :
- Operating condition: Capable of operating continuously in ambient Temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances.
 - Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.

Standards And Safety.

26. Certifications:
- FDA (US) & CE (From Notified Body) from authorized third party and BIS/ISO 13485.
 - Relevant IEC-60601-Part 1 & 2, certificates by a notified agency

27. Local and/or international: Manufacturer / supplier should have ISO certificate for quality standard.

Training And Installation.

28. Training of staff (medical, paramedical, technicians):
- Training of users in operation and basic maintenance shall be provided;
 - Advanced maintenance tasks required shall be documented

Warranty And Maintenance

29. Warranty: 3 Years.


30. Maintenance tasks:
- Maintenance manual detailing;
 - Complete maintenance schedule;

31. Service contract clauses, including prices :
- The spare, accessories & consumables list required for maintenance and repairs in future after guarantee / warranty period should be attached
 - Free servicing during warranty period;



DOCUMENTATION

32.	<p>Operating manuals, service manuals, other manuals: Should provide 2 sets (hardcopy) of:-</p> <ul style="list-style-type: none">• User, technical, maintenance and service manuals to be supplied along with machine diagram• List of equipment and procedures required for routine calibration and maintenance.
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