



Bid Number: GEM/2020/B/711900  
Dated: 15-07-2020

### Bid Document

Bid Details	
Bid End Date/Time	22-07-2020 17:00:00
Bid Opening Date/Time	22-07-2020 17:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	65 (Days)
Ministry/State Name	Ministry Of Health And Family Welfare
Department Name	Department Of Health And Family Welfare
Organisation Name	Post Graduate Institute Of Medical Education And Research Chandigarh
Office Name	Pgimer
Total Quantity	7
Item Category	ICU Ventilator
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	OEM Authorization Certificate *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	Yes
CMC Required	Yes
Inspection Required	No

### EMD Detail

Advisory Bank	State Bank of India
EMD Percentage(%)	2.00
EMD Amount	350000

### ePBG Detail

Advisory Bank	State Bank of India
ePBG Percentage(%)	10.00

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

**Beneficiary:**

ASST. PURCHASE OFFICER

Pgimer, Department of Health and Family Welfare, Post Graduate Institute of Medical Education and Research Chandigarh, Ministry of Health and Family Welfare  
(Yogesh Kumar Sharma)

**Splitting**

Bid splitting not applied.

**ICU Ventilator ( 7 pieces )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Standards	Certifications for the product	-	*
	Certification number and date	-	*
	Confirmity to quality management standards	ISO 9001 & ISO 13485	*
	Confirmity to electrical safety standards	IEC 60601-1 or ISO 80601-2-12 or BIS equivalent	*
Performance Parameters	UMDNS Code	17-429	*
	Scope of item	Intensive care ventilators are defined as mechanical ventilators that can be configured to provide invasive ventilation (e.g., with an endotracheal tube or	*

		tracheostomy tube) or noninvasive ventilation (eg, with a face mask)	
	Clinical application	Mechanical ventilators are life support devices that move gas (e.g., air and/or oxygen) to and from a patient's lungs. These devices may provide temporary or permanent respiration for patients who cannot breathe on their own, or who require assistance maintaining adequate ventilation	*
	<b>Patient Type</b>	Adult, pediatric and neonatal	Adult, pediatric and neonatal
	<b>Type of technology</b>	Turbine	Turbine
	<b>Tidal volume in ml</b>	2 ml or less to 1500 ml or more	2 ml or less to 1500 ml or more
	<b>Respiration rate, breaths/min</b>	upto 150 or more	upto 150 or more
	<b>Trigger mechanism</b>	Both pressure and flow	Both pressure and flow
	FiO2%	21-100	*
	<b>Inspiratory flow rate, L/min</b>	up to 150 or more	up to 150 or more
	<b>Inspiratory pressure, cm H2O</b>	upto 80 or more	upto 80 or more
	<b>IE ratio</b>	1:10 to 4:1	1:10 to 4:1
	<b>Sigh breath function</b>	Yes	Yes
	PEEP/CPAP, cm H2O	upto 40 or more	*
	Pressure support, cm H2O	0-40 or more	*
	Leak compensation	Yes	*
	Auto 100%/Increase O2 button	Yes	*
	<b>Control panel lock</b>	Yes	Yes
	<b>Facility for double lung ventilation</b>	Yes	Yes
Patient Assessment Tools	Maximum wave forms displayed	3 (Pressure and time, volume and time , flow and time)	*
	<b>Number of loops</b>	2 loops (P-V, F-V) with facility of saving of 2 Loops for reference	2 loops (P-V, F-V) with facility of saving of 2 Loops for reference

Maximum trending time in hrs	≥24 hr	*
<b>Lung recruitment tools (PV loops) / OLT (Open lung tools)</b>	Yes	Yes
<b>Lung mechanics visualization tool</b>	Yes	Yes
<b>Capnography/CO2 monitoring</b>	Yes	Yes
<b>Esophageal / transpulmonary pressure monitoring</b>	Yes	Yes
<b>Stress index</b>	Yes	Yes
Modes of ventilation	Volume controlled, Pressure Controlled, Pressure Support, SIMV with Pressure support ,SIMV with volume control with pressure support, ,CPAP/PEEP,Inverse Ratio Ventilation,Non invasive ventilation,Apnea /back up ventilation,SIMV (VC) with Pressure support; SIMV (PC) with Pressure Support; SIMV (PRVC) with Pressure Support	*
<b>ASV(Adaptive support ventilation) or ALT</b>	Yes	Yes
<b>APRV/Bivent/Bi level</b>	Yes	Yes
<b>MMV + PSV /ASV or ALPV or Automode</b>	Yes	Yes
<b>PRVC/Auto flow</b>	Yes	Yes
<b>High flow oxygen therapy</b>	Yes	Yes
<b>Automatic weaning system provided</b>	Yes	Yes
<b>Volume Support</b>	Yes	Yes
Ventilation monitoring facility	The Ventilator is a Microprocessor Controlled ventilator with integrated facility for Ventilation monitoring	*

Monitored / Displayed parameters	Peak inspiratory pressure , Mean airway pressure, PEEP pressure, Tidal volume, Minute volume, Spontaneous minute volume, FiO2 (analyzed %), Respiratory rate , Inspiratory time, Expiratory time, IE ratio, Plateau Pressure	*
Availability of Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc on display	Yes	*
Patient alarms	Low/high FiO2, Low/high minute volume , Low inspiratory pressure , High pressure, Low PEEP , High PEEP , Apnea, Continuous high pressure/occlusion, Inverse IE, High respiratory rate, Breathing circuit disconnect	*
Equipment alarms	Gas-supply failure , Power failure, Vent inoperative, Low battery, Self-diagnostic	*
<b>Non-forced Slow Vital Capacity</b>	Yes	Yes
<b>Physiologic Dead space</b>	Yes	Yes
<b>RSBI</b>	Yes	Yes
<b>Imposed work of Breathing ( WOBI)</b>	Yes	Yes
<b>Expiratory Time constant ( Tcexp)</b>	Yes	Yes
<b>Compliance static and dynamic</b>	Yes	Yes
<b>Inspired and expired resistance</b>	Yes	Yes
<b>Occlusion pressure</b>	Yes	Yes
<b>Inspiratory and expiratory hold</b>	Yes	Yes
<b>Spontaneous</b>	Yes	Yes

<b>frequency</b>		
<b>Total peep, intrinsic peep, extrinsic peep</b>	Yes	Yes
<b>Expiratory block is autoclavable and no routine calibration required</b>	Yes	Yes
<b>Auto compensation for ET Tube</b>	Yes	Yes
<b>Facility for automatic compliance &amp; Leakage compensation for circuit available</b>	Yes	Yes
<b>RS 232 out put port</b>	No	Yes, No
<b>USB/Memory card</b>	Yes	Yes
Availability of Remote alarm/display port	Yes	*
Facility to Report (vent alarms and patient status)	Yes	*
<b>HLT Compliant out put</b>	Yes	Yes
<b>Type of coloured display</b>	LED	LED
<b>Display should be touch screen</b>	Yes	Yes
<b>NIV (Non Invasive Ventilation) to be possible in all modes of ventilation available</b>	Yes	Yes
<b>Size of display (in inches)</b>	12	12
<b>Graphic display have automatic scaling facility for waves</b>	Yes	Yes
Power supply	220-240 V , 50 Hz AC single phase	*
<b>Provision of UPS</b>	Yes	Yes
<b>Backup time in hrs</b>	2	2
Internal backup battery	Yes	*
Backup time for internal battery in mins	45 mins or more	*
<b>Built in air source</b>	Turbine (In built)	Turbine (In built)

	<b>Availability of stand alone compressor</b>	No	No
	<b>Compressor certification</b>	US FDA	US FDA
	<b>Compressor shall provide an oil free Medical air, with Peak output flow should be minimum 150 LPM and Air quality complying with ISO compressed air purity class</b>	NA (for turbine)	NA (for turbine)
	Medical Air Compressor should automatically activate in the event of wall air supply loss and replacement of internal filters should be performed without removing the compressor, have washable air filter	NA (for turbine)	*
	<b>Seller shall ensure compatibility of compressor with ventilator</b>	NA for Turbine	NA for Turbine
	<b>Inbuilt nebulizer with particle size less than 3 micron</b>	Yes	Yes
	<b>Comprehensive Warranty in years</b>	5	5
Additional Accessories	Reusable silicon breathing circuits for Adult, pediatric and Neonatal	2 each	*
	NV mask(Reusable)-Small, medium and large	2 Each	*
	Length of Power cord in m	>3 m	*
	<b>Type of flow sensor</b>	Reusable	Reusable
	No of reusable flow sensor	2 no.	*
	<b>No of disposable flow sensor</b>	NA	NA
	Autoclavable exhalation valve/expiratory cassette / filter	2	*

Miscellaneous Parameters	<b>Humidifier: Servo controlled with digital monitoring of inspired gas temperature with heating wire</b>	NA	NA
	Trolley for ventilator with circuit holding arm	Yes	*
	Number of installations in Central /State/PSU Govt Hospitals ( Hint: Seller should supply a performance certificate of the device to the buyer incase demanded after placement of order)	<3	*
	OEM/Reseller (if supplied by reseller shall ensure uninterrupted availability of all spares for 10 years)	Yes	*
	Availability of toll free facility for technical support maintained by OEM or authorized agencies	Yes	*
	During the warranty period it shall be ensured that all the break down calls are attended with in 24 hrs and the complete details of service agents / contact details should be furnished to buyer and consignee at time of supplies	Yes	*
	User/Technical/Maintenance manuals to be supplied in English in hard and soft copy	Yes	*
	Details of equipments and procedures required for local calibration and routine maintenance to be supplied and advanced maintenance task documentation also to be furnished	Yes	*
	List of important spares	Yes	*



	and accessories, with their part numbers and price lists to be supplied to the buyer at the time of supplying the equipment		
	Demonstration of equipment and training to be provided after completing supplies before acceptance	Yes	*
	The Principal Manufacturer must have direct Presence/approved service center In India	Yes	*
	Copies of reports and certifications to be furnished to buyer on demand at time of supplies	Yes	*

\* Specifications highlighted in bold are the Golden Parameters.

\* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

#### Additional Specification Documents

#### Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Ramesh Lal	160012,Store Officer Central Stores Nehru Hospital POST GRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH, sector 12 CHANDIGARH	7	45

#### Special terms and conditions for category ICU Ventilator

1. Comprehensive warranty Comprehensive warranty shall include preventive maintenance including calibration as per technical/ service /operational manual of the manufacturer, service charges and spares,. During the warranty period commencing from date of the successful completion of warranty period, Service personnel shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, at least once in six months. warranty shall not be including the consumables .Further there will be 98% uptime warranty during warranty period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend warranty period by double the downtime period.Service centresDetails of Service outlets in India to render services for equipment to be furnished to buyer/consignees with complete address ,telephone numbers, e mails etc at time of making the supplies .It shall be the responsibility of seller to ensure that authorized service centres are available to

cater to the areas where supplies are made within reasonable distance from where the service calls can be handled .Details of toll free numbers for service call and online registration of service requests also to be provided buyer/consignee at the time of supplies.Source of supplyIt shall be responsibility of seller to provide Documents regarding source of equipments such as copy of Performa invoice or any other documents to establish that the products supplied are manufactured by OEM indicated and sourced from them.Packing and MarkingMedical equipments being very delicate and sensitive packing for the goods should be strong and durable enough to withstand transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. .The size, weights and volumes of the packing cases, remoteness of the final destination of the goods, availability or otherwise of transport and handling facilities at all points during transit up to final destination,. Quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall take in to consideration the type of medical equipments being supplied. The accessories shall be suitably labelled and packed .Each of the package shall be marked on three sides with indelible paint of proper quality: indicating contract number and date , brief description of goods including quantity ,. Packing list reference number , country of origin of goods and any other relevant details.Spare PartsSeller shall provide materials, information etc. pertaining to spare parts manufactured and supplied by the OEM . It shall be ensured that the required spares are available for purchase at least for 10 years from date of supplies .In case due to any reasons the production of the spare parts is discontinued sufficient advance notice should be given to the buyer/consignee before such discontinuation to provide adequate time to purchase the required spare parts etc. Further, OEM and their service centres/dealers shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the equipments so that the same are available.OEM or reseller shall always accord most favoured client status to the buyer/consignee and shall give the most competitive price for spares and consumables of its machines/equipments supplied.Installation, Training, ManualsSeller shall be responsible to carry out Installation & commissioning, Supervision and Demonstration of the goods. They shall provide required jigs and tools for assembly, minor civil works for the completion of the installation and Training of Consignee's representatives for operating and maintaining the equipment and Supplying required number of operation & maintenance manual for the goods. In case the category parameters are specifying any requirements regarding the installations , training and manuals the same shall also be applicable. Electrical safety checkingSellers are required to make sure that they furnish the list of equipments for carrying out routine and preventive maintenance to buyer/consignee. They should make sure to periodically check the electrical safety aspects as per BIS Safety Standards or equivalent .In case they do not have required equipment for such testing should ensure that the equipments checked for electrical safety compliance through labs with facilities for such checking during every preventive maintenance call. Software All software updates should be provided free of cost during warranty period.

## **Bid Specific Additional Terms and Conditions**

1. If the agency is registered under MSME or NSIC, then EMD exemption certificate needs to be enclosed.
2. Make in india specific authorisation certificate needs to be enclosed.
3. IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.
4. SLBR52
5. Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)
6. ISO 9001: The bidder must have ISO 9001 certification.
7. The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

8. To be eligible for award of contract, Bidder / OEM must possess following Certificates / Test Reports on the date of bid opening (to be uploaded with bid): THE SELLER SHOULD SUBMIT ALL DOCUMENTS I.E AUTHORIZATION CERTIFICATE, WARRANTY FOR 5 YEARS .
9. Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.
10. Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.
11. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.
12. Warranty period of the supplied products shall be 5 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid

## **Additional Clause For Comprehensive Maintenance Charges**

1. CMC shall include preventive maintenance including calibration as per technical/ service /operational manual of the manufacturer, service charges and spares, after satisfactory completion of Warranty. During the CMC period commencing from date of the successful completion of warranty period, Service personnel shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, at least once in six months. CMC shall not be including the consumables. Further there will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
2. CMC charges to be indicated as percentage of cost of equipment quoted for each year after the warranty period.
3. GST shall be included in the CMC Charges quoted.
4. Cost of CMC will be added for Ranking/Evaluation purpose with depreciation formula. A 10% discounting rate per year shall be applied on CMC Charges for price evaluation on present value.
5. The payment of CMC will be made on quarterly basis after satisfactory completion of said period, duly certified by end user.
6. While creating a bid or RA buyers shall indicate whether CMC is required against Yes/No options. If CMC Charges are included an option for number of years for CMC required after the warranty period shall be available. Under this options up to 5 years can be chosen for CMC charges beyond warranty period.
7. The CMC functionality shall be available in bid only and no direct RA shall be applicable. In case of bid to RA decrement rules shall be applicable on total price inclusive of CMC charges. Bunching of products shall not be available while creating bids with CMC charges.
- 7.1. Buyer shall indicate number of years of warranty by selecting option of 2 or 5 available in the field depending on warranty parameter applicable in category parameters for the equipment. The

Seller while participating in Bid/RA will get fields to indicate CMC charges as percentage depending on number of years of CMC selected by Buyer. The following shall be applicable If 5 year CMC selected

- CMC charges for first year after warranty period – Percentage to be indicated- A 1
- CMC charges for second year after warranty period – Percentage to be indicated A2
- CMC charges for third year after warranty period – Percentage to be indicated A3
- CMC charges for fourth year after warranty period – Fixed amount to be indicated A4
- CMC charges for 5th year after warranty period – Percentage to be indicated A5

7.2. The calculation of CMC Charges shall take in to account of number of years of warranty and duration of CMC as specified while creating bid.

7.3. In the price evaluation, the system shall provide function to calculate the cost of each equipment by formula indicated below including CMC and then show the inter-se- ranking of the bidders. The following are the variables.

(i) Number of years for which CMC required.

(ii) Number of years of warranty. The formula for calculating total cost including CMC charges shall be :

Total cost for evaluation=  $C + C \cdot (A1/100) / (1.10^n) + A2/100 / (1.10^{n+1}) + A3/100 / (1.10^{n+2}) + A4/100 / (1.10^{n+3}) + A5/100 / (1.10^{n+4})$

C – Cost for equipment quoted and n shall be number of years of warranty specified

If 2 year warranty specified n shall be 2 and if 5 year specified n shall be 5.

A1,A2 A3 A4 A5 shall depend on how many years CMC selected If 3 year means only A1,A2 and A3 factor to be not taken in to account and A4 and A5 will not be applicable

7.4. CMC charges to be indicated for each subsequent year should be same or higher than preceding year.

7.5. The CMC charges shall be offered within range of 3 to 10% of cost of equipment.

8. Since CMC charges are to be paid only later for each year during CMC period , applicable performance guarantee amount after placement of contract shall be based on the cost of equipment and not on basis of cost of equipment along with CMC Charges.

9. Performance bank guarantee applicable for CMC is to be submitted at start of the CMC and shall be applicable 2.5% as specified in bid on the total contract value including CMC Charges The PBG submitted after award of contract shall be released only after new PBG for the CMC period is submitted and accepted by buyer/consignee after due verification. Bank guarantee for CMC is to remain valid till completion of CMC period plus one year .The bank guarantee for CMC shall be submitted to buyer directly.

10. In case of splitting of quantity equipment cost and CMC charges offered by L-1 in the evaluated cost shall be matched by higher quoting eligible bidders on one to one basis .The equipment cost shall be matched and CMC charges shall be matched year to year.

11. The CMC Contract shall be an offline contract to be handled by buyer. The payment of CMC will be made on quarterly basis after satisfactory completion of said period, duly certified by end user and scope of CMC will be as per para 1 above.

12. The above terms and conditions shall be part of the bid as well as part of the contract.

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**