



Running Contract Details	
Equipment Name	Ventilator ICU
Running Contract Valid Till	29-04-2026
Tender Ref No	KMSCL/EP/T412/135/2021
Tendered Quantity	250
Supplier Name	M/s Air Liquid Medical Systems Pvt Ltd
GST No	33AAACE8420F1Z3
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
5th Floo Tower B Campus Tek Meadows No 51 Rajiv Gandhi Salai Sholinganallur Chennai - 600119	Contact Person	Mahesh
	Phone	
	Mobile No	9895019008,
	Email	airliquideservice@gmail.com,mahesh.m@airliquide.com,sharmi.kishore@airliquide.com,sales.ecss@airliquide.com,nishad.nava@airliquide.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>Ventilator ICU</b> <i>Model &amp; Make : Extend XT/Air Liquid</i>	813120 Incl.GST :12%	59967.6	873087.6
2	<b>Air Compressor</b>	71980 Incl.GST :18%	5038.6	77018.6
		<b>885100</b>	<b>65006.2</b>	<b>950106.2</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>Ventilator ICU</b>							
Labour	23,000.00	24,150.00	25,358.00	26,625.00	27,957.00	29,354.00	30,822.00
Comprehensive	65,000.00	67,250.00	69,613.00	72,073.00	74,698.00	77,433.00	80,304.00
<b>Air Compressor</b>							

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
AMC	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAMC	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 3.00% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

### **Technical Specification**

#### **Equipment :Ventilator ICU**

#### **Ventilator ICU**

##### I. Ventilation modes

1. Assist and Controlled mode - Volume and pressure
2. SIMV/V and SIMV/P.
3. Bi-level Ventilation: APRV or equivalent.
4. CPAP and PEEP.
5. Facility for Non-Invasive ventilation including control and support
6. Dual-mode PRVC or equivalent
7. Spontaneous weaning modes: ASV/PAV+/ Auto flow / Equivalent
8. Lung protection tools /equivalent technology
9. Pressure support ventilation with PS 35cm of water or above

##### II. Should have real-time monitoring for:

1. Peak -Pressure, Plateau -Pressure, Mean - Pressure, PEEP Pressure and Weaning Parameters
2. Exhaled tidal volume and Minute Volume
3. Inhaled tidal volume
4. FiO2
5. Lung mechanics - - Resistance, Compliance, Occlusion Pressure, intrinsic PEEP

##### III. Patient category: Adult and Pediatric

##### IV. Ventilation parameters: -

1. Tidal volume

a. 200 – 2000 mL (Adult patient).

b. 20 to 300 mL (Paediatric mode).

1. Respiratory rate- 5 - 80 BPM or more.
2. Pressure - 0 - 100 cm H<sub>2</sub>O including PEEP.
3. Inspiratory Peak flow- maximum of 180litre/min.
4. Minute volume - 1 - 30 l/min.
5. Oxygen Concentration - 21 -100 %
6. PEEP/CPAP - 40 cm H<sub>2</sub>O
7. Deceleration flow pattern in CMV should be available
8. Trigger flow & pressure 1 to 10
9. NIV modes facility
10. Spontaneous mode –CPAP

V Standard Accessories (with each machine): -

1. Patient circuit (Adult, Autoclavable and reusable) – 1 complete set.
2. Patient circuit (pediatric ,Autoclavable and reusable) - 1 complete set.
3. HME-25each
4. Bacterial and viral filter - 25nos each
5. Medical Nebulizer with vibrating mesh technology with particle size less than 3 microns - Volume compensated - Complete set.
6. Heated Humidifier with one chamber adult - 1 No.
7. O<sub>2</sub> pressure regulator with 5 meters hose (conversion kit) - 2 no
8. Hose for O<sub>2</sub> connection with connector - 5 mts.
9. Hose for compressed air with connector - 5 mts.
10. Test lung - 1 No.
11. Expiratory Transducer/ Sensor/ Valves ,Autoclavable and reusable- 2 Nos
12. NIV mask (large & medium reusable) - 2 nos

VI. Features: -

1. Back up mode for apnea.
2. Full alarm system for all ventilator settings and monitored values.
3. Touch screen Monitor (12" or higher size) graphical display for real-time display of three waveforms. Should display a minimum of 2 scalars simultaneously and 2 loops.
4. Monitoring of all patient data in graphical and numerical form should be possible with a trend facility for a minimum of 24 hours with HIS Compatibility.
5. Direct access to vital settings
6. Inbuilt, secure expiratory flow sensor with expiratory valve and transducer. It should be Autoclavable as a unit( including expiratory valve, flow sensor) and reusable. The expiratory flow sensor should work on hotwire/electromagnetic/Ultrasonic/differential pressure principle. The unit should be rugged and with a history of trouble-free operation.
7. PEEP valve should be built-in.
8. The patient circuit should have a separate inspiratory and expiratory limb with water traps.
9. Should have a safety certificate from a competent authority CE issued by a notified body registered in the European commission / FDA (US) . Copy of the certificate/ test report shall be produced along with the technical bid
10. O<sub>2</sub> sensor and flow sensor should be covered in the Warranty / CAMC period
11. All accessories except the patient circuit should cover in Warranty / CAMC

VII Pneumatic Gas Sources:

1. Should have a Gas delivery system by soundless (not more than 50 decibels at a 1-meter distance) external integrated compressor from the same manufacturer. In case of compressor failure, it should also be operable with a compressed air/oxygen supply of 45 to 60 psi. European CE Certificate for compressor should be provided. Price should quote separately.
2. Replacement guarantee should be provided for battery, flow sensors, expiratory valve, and oxygen sensor for the entire 3 years warranty period and also the rate offered for CMC should include the replacement guarantee for battery, flow sensors, and oxygen sensor and expiratory valve.
3. The unit must be supplied with a good quality moisture filter

VIII. Power Source: -

1. 220/240 V Ac 50 Hz supply.
2. Internal battery (maintenance-free) with 1 hour minimum operating time for the ventilator

IX Mounting

Mounting Trolley/cart mounting for easy transportation, from the same Manufacturer

X Others

1. Apart from the preventive maintenance mentioned in the tender clause 5.1, Preventive maintenance as per the manufacturer's recommendation shall be done free of cost in warranty and CMC period. All parts required for the preventive maintenance shall be replaced at free of cost.
2. A surge protector should be provided with each machine
3. All electronic equipment should comply with electrical safety standards as per IEC60601/1.
4. Compliance statement should be provided with documentary evidence in terms of Catalogue and datasheet by which the claim is confirmed
5. Onsite physical demonstration of the machine with all standard accessories will be mandatory if demanded by the technical committee for clinical application