

Ventilator ICU

I. Ventilation modes

1. Paediatric mode.
2. Controlled mode.
3. Asst. Controlled mode.
4. Pressure Controlled Ventilation.
5. SIMV/V and SIMV/P.
6. Bipressure Ventilation.
7. CPAP and PEEP.
8. Facility for Non-Invasive ventilation
9. Plateau Facility.
Add following modes to existing modes.
 1. PrVC/equivalent,
 2. Automode/equivalent,
 3. Apnea backup in Pressure and volume
 4. Control mode
 5. IBW Setting.

II. Ventilation parameters: -

1. Tidal volume - 20 – 2000 ML.
2. Respiratory rate - 5 – 100 BPH.
3. Pressure - 4 – 80 cm H₂O.
4. Inspiratory Peak Flow - 4 – 180 l/min.
5. Minute volume - 1 – 30 l/min. and can be set by respiratory and tidal volume.
6. Oxygen Concentration - 21 – 100 %
7. Inspiratory pause - 0.1 – 2.0 sec.
8. PEEP/CPAP - 30 cm H₂O.

III. Standard Accessories (with each machine): -

1. Patient circuit(Adult reusable) - 2 complete set.
2. Patient circuit (Paediatric reusable) - 1 complete set.
3. Nebulizer Ultrasonic one - Complete set.
4. Humidifier - 1 No.

5. O2 Pressure Regulator with hose - 1 No.
6. 5 meters (conversion kit)
7. Hose for O2 connection with connector - 5 mts.
8. Hose for compressed air with connector - 5 mts.
9. Test lung - 1 No.

IV. Features: -

1. Back up mode for apnea.
2. Full alarm system for all ventilator settings and monitored values.
3. Monitor with greater than 12" TFT color touch screen for graphical display for real time simultaneous display of three(Pressure, Volume and Flow) waveforms. Must have provision for display of 3 waveform graph and 2 loops simultaneously.
4. Monitoring of both patient data and set values should be possible with trend facility.
5. Direct access to vital settings
6. Transducer should be sterilizable and reusable.
7. PEEP valve should be built in.
8. Patient circuit should have a separate inspiratory and expiratory limb.
9. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL.

Features:

Monitor shall measure RSBI (Rapid shallow breathing index), P 0.1 (Tracheal Occlusion Pressure) dynamic compliance, airway resistance and auto PEEP Flow sensor shall have life time replacement warranty.

Delivery of 100% oxygen for 3 minutes with a single button for pre and post suction management.

V. Pneumatic Gas Sources:

1. Gas delivery system by sound less in built compressor / external integrated compressor with the unit.
2. In case of compressor failure it should also be operable with compressed air / oxygen supply of 45 to 60 psi.

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VI. Power Source: -

220/240 V Ac 50 Hz supply.

Internal battery (maintenance free) with 3 hour minimum operating time for the ventilator.

Vii. Mounting

Trolley/Cast mounting for easy transportation