

## ICU VENTILATOR:

- Tidal volume 50-2000ml better on either side.
- Pressure up to 80 cm H<sub>2</sub>O
- Volume up to 120 L/min
- Respiratory rate: up to 60 breaths per minute.
- SIMV Respiratory Rate: up to 40 breaths per minute.
- CPAP/PEEP up to 20 cm H<sub>2</sub>O.
- Pressure support up to 45 cm H<sub>2</sub>O.
- FiO<sub>2</sub> between 21 to 100 %
- Inspiratory and expiratory times up to at least 2 sec and 8 sec respectively
- I:E Ratio at least from 1:1 to 1:3.
- Modes of ventilation:
  - i. Volume controlled.
  - ii. Pressure controlled.
  - iii. Pressure support.
  - iv. Synchronized intermittent mandatory ventilation (SIMV) with pressure support.
  - v. Assist / control mode
  - vi. CPAP/PEEP
  - vii. PSV
  - viii. SPONT
  - ix. MMV
  - x. SIGH
- Alarms required: FiO<sub>2</sub>, minute volume, pressure, PEEP, apnea, occlusion, high respiration rate, disconnection
- System alarms required: power failure, gas disconnection, low battery, vent inoperative, sensor diagnostics
- If alarm silencing feature is incorporated, it must be temporary and clearly displayed when activated
- Air and externally supplied oxygen mixture ratios fully controllable
- Inlet gas supply (O<sub>2</sub>) pressure range at least 35 to 65 psi
- Turbine with inlet filter
- With Humidifier(Optional)

The Ventilator must be dual certificate

(CE and FDA OR CE and MHLW OR FDA and MHLW)

NOTE: All the Allied Accessories of the monitors

Operating Features and Characteristics:

Non fade TFT color display

Electro-surgical interference suppression/protection

Defibrillator protection

Waveform: 7 Wave forms should be available

Waveform trace speed: 25/50 mm/sec

Screen Size: min. 10" or more TFT/LCD color Touch Screen display

**PARAMETERS:**

• **ECG:**

Numeric: heart rate

• ECG trace

12-Lead ECG option should be available in the monitor.

• **Non-Invasive Blood Pressure (NIBP):**

Method: Oscillometric principle

Numeric: Systolic, diastolic and mean pressures

Selectable auto inflate interval settings

Rising cuff / continuous pressure display

• **Temperature:**

Numeric: Temperature selectable in °C / °F

• **Pulse Oximetry:**

Numeric: 0-100% oxygen saturation measuring range.

• **Arrhythmia Analysis:**

Arrhythmia analysis and ST analysis

• **Respiration:**

Breath rate display and alarms.

• **Other Features:**

Trend Data; 160 hours trend graphical and tabular

• **Alarms:**

High & low (settable) on all parameters

Visual and audible indication of alarms.

• The System should includes USB, RS-232, VGA, VLAN, WLAN, and a multifunctional port.

• The System should have capability to Interface with HL7 outbound.

• **Operating Requirements:**

Ac 220v/50hz

Built-in rechargeable battery for at least 2 hours AC power failure at full parameter.

• Country of Origin: Japan, USA, Europe

• SYSTEM MUST HAVE DUAL CERTIFICATION; (CE MDD & FDA, CE MDD & JIS/MHLW , FDA & JIS/MHLW)