

SwasthVayu - Non Invasive Ventilator -- Specifications

SALIENT FEATURES

- Three modes of Operation-Continuous, Timed and Spontaneous
- Automatic and Manual operation
- Easy to use User Interface
- Programmable respiration cycles
- Statistics of each patient for diagnostics
- Alarms on various events
- HEPA Filter, HME & BV Filters usage to reduce contamination

The various parameters & performance figures of SwasthVayu – Non Invasive Ventilator are presented in the below table.

Parameters	Specifications
Pressure range	4 - 25 cm H ₂ O
Starting ramp	4 to EPAP min
Breath rate	0 - 30 beats per minute
Ramp time	0 to 45 min (5-min increments) min
Data storage capacity	up to 3 months, Configurable. 16 GB Memory
Electrical	100-240 VAC, 47 to 60 Hz (nominal)
Battery Backup	2 Hours of backup with Li-Ion Batteries
Device setup	LCD/control wheel/push button
Compliance meter	Breathing detection
Altitude Compensation	Automatic (optional)
Alarms	Low Pressure, High Pressure, High Breath Rate, High VTI, Low VTI & Low Battery
Additional Features	Configuration Settings for Pressure, Mode of operation, Rate Setting, Number of cycles
Filters	Input HEPA Air Filter, HME & BV filters to prevent contamination during Inhaling & Exhaling period.

ACCESSORIES

- ❖ Input and output Antibacterial Filters (HME + BV)
- ❖ Output delivery hose
- ❖ Non Vented Face Mask
- ❖ TEE Manifold with Silicon tubes

BASIC MODES OF OPERATION

The System operates in the following modes.

- **Continuous Positive Airway Pressure:**

The Ventilator provides Continuous fixed Positive Airway Pressure.

- **Timed Mode:**

The ventilator provides timed breath delivery with Pressure Support Ventilation. The unit cycles between the IPAP and EPAP levels based solely on the timing intervals.

- **Spontaneous/Timed (S/T Mode):**

The Ventilator provides spontaneous or timed breath delivery with Pressure Support Spontaneous Ventilation. The unit cycles between the IPAP and EPAP levels in response to patient triggering. This mode synchronizes patient breath cycle with the Ventilation mechanism.

Manufacturer

ACL - Apollo Computing Laboratories (P) Ltd., is a premier Leading Aerospace Company involved in the Design Development and Production of Major On-Board Electronic Systems for the Strategic National Defence Programmes like AGNI Series of Missiles, LCA / Tejas Military Fighter Aircraft etc.

SwasthVayu - The Non Invasive Ventilator Technology is Transferred to ACL by National Aerospace Laboratories (NAL), a constituent of the Council of Scientific and Industrial Research (CSIR), the only Government Aerospace Research & Development Laboratory in the Country's Civilian Sector.

Note: ACL reserves the right to change the specifications without prior notice.