

## Council of Scientific and Industrial Research National Aerospace Laboratories



# Bi level Positive Airway Pressure System (Bi+AP V1)

# Portable Ventilator for COVID19

- 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



Parameters	Specificaation
Pressure range	4 - 25 cm H2O
Starting ramp	4 to EPAP min
Breath rate	0 - 30 beats per minute
Data storage capacity	up to 3 months, Configurable (optional)
Electrical requirements	100-240 (50/60) VAC (Hz)
<b>Device setup</b>	LCD/control wheel/push button
Compliance meter	Breathing detection
Altitude compensation	Automatic(optional)
Alarm	High Pressure, Low Pressure, Cycle Time overrun.  System Fault
Features	Configuration Setting for Pressure, Mode of operation, Rate Setting, Number of cycles
Filters	Input Foam Air Filter, Antibacterial filter



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# **Bi-Level Positive Airway Pressure System**



### **Accessories:**

- 1. Input Foam Filter
- 2. Input and output Antibacterial Filter
- 3. Output delivery hose
- 4. Mask

#### **Basic Modes of Operation:**

The System operates in the following three modes.

#### **CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP):**

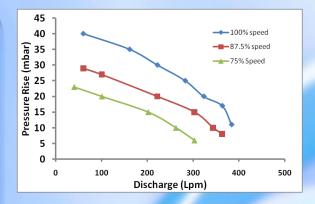
The ventilator provides Continuous fixed Positive Airway Pressure (CPAP).

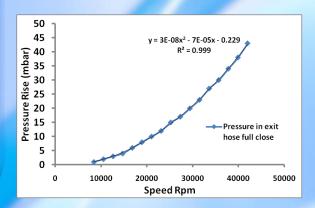
#### **TIMED MODE:**

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.







#### Director

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