

MAX

PROTON PLUS Critical Care Ventilator



MAX

Manufactured - By :

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Your reliable partner in patient ventilation

www.max-ventilator.com

Critical Care Ventilator with Wide Range of Clinical Solutions

Complete Care to Critical Care Patients :

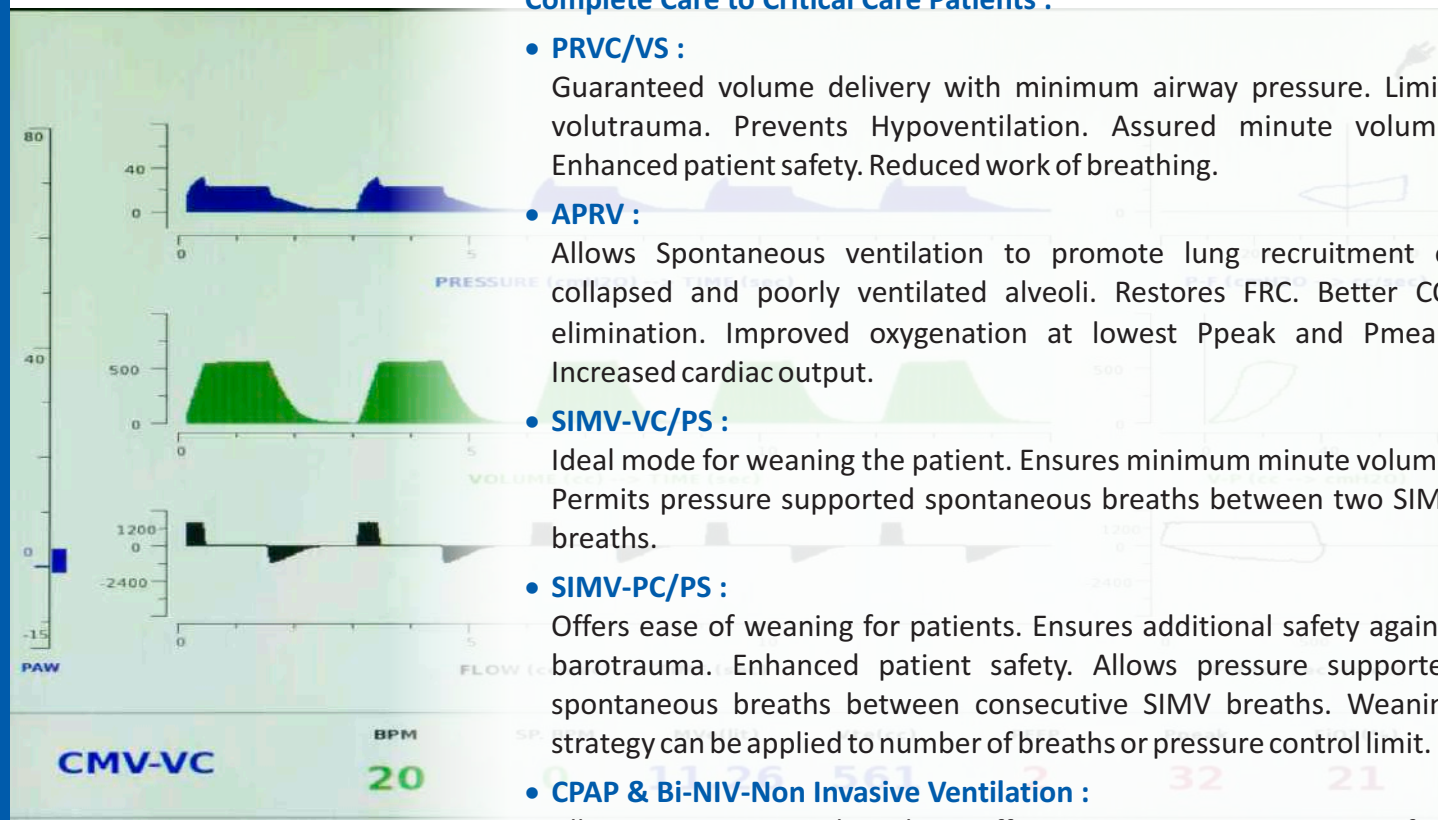
- PRVC/VS :**
 Guaranteed volume delivery with minimum airway pressure. Limits volutrauma. Prevents Hypoventilation. Assured minute volume. Enhanced patient safety. Reduced work of breathing.
- APRV :**
 Allows Spontaneous ventilation to promote lung recruitment of collapsed and poorly ventilated alveoli. Restores FRC. Better CO₂ elimination. Improved oxygenation at lowest Ppeak and Pmean. Increased cardiac output.
- SIMV-VC/PS :**
 Ideal mode for weaning the patient. Ensures minimum minute volume. Permits pressure supported spontaneous breaths between two SIMV breaths.
- SIMV-PC/PS :**
 Offers ease of weaning for patients. Ensures additional safety against barotrauma. Enhanced patient safety. Allows pressure supported spontaneous breaths between consecutive SIMV breaths. Weaning strategy can be applied to number of breaths or pressure control limit.
- CPAP & Bi-NIV-Non Invasive Ventilation :**
 Allows spontaneous breathing offering maximum patient comfort. Ideal for supportive respiration requiring minimum overall intervention.
- VS-Auto :**
 Combination mode with benefits of VS and PRVC. VS option allow Pressure Supported, Volume Assured Spontaneous breaths. Backup mode ensures assured minute volume with exposure to minimum airway pressure. Offers highest patient safety against volutrauma, Hypoventilation, abnormal airway pressure and apnic condition.
- PSV-Auto :**
 Increase patient comfort level with low work of breathing makes it perfect choice for weaning the patient. Backup mode enables breath delivery of mandatory breaths at controlled pressure ensuring patient safety.

User Friendly Concept :

- Dual Display
- Large display showing all lung dynamics simultaneously on same screen
 Curves : Airway Pressure V/s Time, Tidal Volume V/s Time, Flow Rate V/s Time
 Loops : Airway Pressure V/s Flow Rate, Tidal Volume V/s Airway Pressure, Flow Rate V/s Tidal Volume
- Easy and Quick setting Keyboard

Economy of Operation :

- Long Life Flow Sensor and FiO₂ Sensor
- Consumes least number of parts per patient.
- Designed and built to operate in harsh environment.
- Low Operational Cost per Patient.
- Built to Last Long.



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Modes of Ventilation	
Volume Control Modes	CMV - VC, ASSIST - VC, SIMV - VC/PS
Pressure Control Modes	CMV - PC, ASSIST - PC, SIMV - PC/PS
Advanced Modes	PRVC/VS, APRV
Non - Invasive Modes	CPAP, Bi - NIV
Auto Modes	PSV - Auto, VS - Auto
Settable Parameters	
Breaths Per Minute (BPM)	Up to 120
Tidal Volume (V _t)	20 to 300 cc Pediatric
	300 to 3000 cc Adult
Inspiratory Time (Ti)	0.2 to 4 sec
Peak Flow Rate	6 to 150 LPM
Inspiratory Pressure	Up to 80 cm of H ₂ O
PEEP	0 to 35 cm of H ₂ O
Inspiratory Pause	0 to 50% of Ti
FiO ₂	21 to 100%
Pressure Trigger	-0.5 to -15 cm of H ₂ O
Flow Trigger	0.3 to 30 LPM
Apnea Back-up Time	5 to 60 sec
Measured Parameters	
No. of Breaths	Spontaneous, Total Breaths per minute
Airway Pressure	Peak, Plateau, Mean, PEEP
Patient Trigger	Trigger Pressure, Trigger Flow
Tidal Volume	Inspired Volume, Expired Volume
O ₂ Concentration	Inspired FiO ₂
Lungs Mechanics	Lung Compliance, Lung Resistance
Minute Volume	Expired Minute Volume
Alarms : Preset and Settable	
Airway Pressure	High, Low
Inspired V _t	High, Low
FiO ₂	High, Low
Expired Volume	Low
PEEP	High, Low
Breaths Per Minute	High
Apnea Alarm Time	5 to 60 sec
Information on LCD	
Parameters	Dynamic Airway Pressure Indication Mode, BPM, Spont. BPM, VTi, VTe, PEEP, Ppeak, FiO ₂
Curves & Loops	Airway Pressure v/s Time Tidal Volume v/s Time Flow Rate v/s Time Airway Pressure v/s Flow Rate Flow Rate v/s Tidal Volume Volume v/s Airway Pressure
Display Size	47 cms TFT LED Monitor
Special Features	
• Nebulizer	• O ₂ Enrichment
• Manual Breath	• Standby Function
• Tube Compensation	• Inspiratory Hold
• Apnea Backup Ventilation	• Altitude Compensation
Electrical and Gas Supply	
Input Supply	175 - 260 Volts or 90 - 132 Volts AC, 50/60 Hz
Internal Battery Backup	90 Minutes
External Battery Backup	10 to 15 Volts DC (Optional)
Power Consumption	70 Watts (Approx.) for Basic Ventilator
Gas Input	Medical Grade Air and O ₂ at 2.7 - 6 Bar (39-87 psi)
Weight	15 Kgs. (only Ventilator, without Cart)
Standard Accessories	Breathing Circuit
Optional Accessories	Humidifier, Medical Grade Compressor

Specifications are subject to change without prior notice. Accessories shown in image are optional and not the standard part of ventilator.