

Ventilator Series for COVID-19



PV-3100D
Portable Ventilator



MV-3100
Medical Ventilator



PV-3100C
Portable Ventilator



CPAP-3200D
Infant CPAP System



IV-3200Y
Infant Ventilator



V-3201
Ventilator

EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

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MV-3100

Medical Ventilator



►► Technical Specifications

PARAMETER		SPECIFICATION
Indicators	Insp. Phase	+/-0.1kPa Green Indicator
	Charging	Red Indicator
	Exh. Phase	Green Indicator
	Low Battery	Red Indicator
Breath Rate		10, 15, 20, 25, 30, 35bpm
I:E		2:1, 1:1, 1:1.5, 1:2, 1:2.5, 1:3
Tidal Volume		300~1000ml
W*D*H		380X120X240mm
Weight		3kg
AC Voltage		110V~240V
DC Voltage		12V
Inlet Battery		12V, 2Ah
Oxygen Inlet		Pressurized Oxygen (0.28~0.6 MPa medical oxygen)

►► Standard Accessories

- Ventilator - 1 unit; Breath Circuit - 1pc; Breath Valve - 1pc; Oxygen Pressure Reducer (for normal oxygen cylinder) - 1pc; Mask - 1pc; Hand Book - 1pc; Battery (can be used for 8 hours) - 1pc; Charger - 1pc; Flesh - 1pc; CD for operation - 1pc

PV-3100C

Portable Ventilator



►► Technical Specifications

- **Physical Specifications**

Dimension: Width 300mm, Depth 160mm, Height 230mm, Weight 3Kg

Carrying Packages Dimension: Width 460mm, Depth 200mm, Height 400mm, Weight 7Kg

Packaging Dimension: Width 620mm, Depth 240mm, Height 410mm, Weight 11Kg

- **Storage/Shipping Requirements**

Temperature: -20 to 70°C

Relative Humidity less than 93%

The atmosphere pressure: 70 to 106 kPa

- **Operating Requirements**

Temperature: 5 to 40°C

Relative Humidity less than 80%

The atmosphere pressure: 70 to 106 kPa

- **Electrical Specifications**

Input Voltage Requirements: AC Voltage 110V~240V; DC Voltage 12V

Inlet Battery: 12V, 2Ah (Can be used for 8 hours)

Frequency: 50Hz/60Hz

Power: 2A

- **Pneumatic Specifications**

Pressurized Oxygen: 0.4MPa medical oxygen inlet or use 2L oxygen cylinder (Choice of suppliers)

- **Performance Specifications**

Power: ON/OFF

Modes: CMV(IPPV), A/C(SIPPV), SIMV, SPONT, PEEP (Choice of suppliers)

Tidal Volume: 50~1200ml

Breath Rate: 5~60 bpm

PEEP: 0~2kPa

O₂ %: 45~90%

Sigh: 1~10 per 100 breath

Peep: 10-60hpa (Choice of suppliers)

Trigger Level: -10 ~ 0hpa

Over Pressure Relief: <6kpa

- **Alarms and Indicators**

High Pressure Alarm Limit: 2~6kpa flash, red indicator

Low Pressure Alarm Limit: 0. 2~2kpa Red indicator

Alarm Silence: 120sec

- **Standard Accessories**

Ventilator	1unit
Oxygen Cylinder	1pcs (2.5L can be used for 1 hour)
Breath Circuit	1pcs (1.2m)
Carrying Package	1pcs (all parts in it)
Breath Valve	1pcs
Mask	1pcs
Charger	1pcs
Battery	1pcs (can be used for 8 hours)
Wrench	1pcs
Oxygen Pressure Reducer	1pcs (for Normal Oxygen Cylinder)
Lung Simulators	1pcs
Hand Book	1pcs
CD For Operation	1pcs

►► **Scope of Medical Ventilator**



For First Aid



For Ambulance



For Transport

PV-3100D

Portable Ventilator



►► Introduction

- Used for First-Aid, Ambulance, Emergency and patients transport in hospital, this medical ventilator can be used for pediatric and adult patients.
- A button operation, it is simple to use with digital control and precise parameters, and contains special self-test function to ensure the patient's safe.
- This medical ventilator consists of ventilators, 2L Aluminum Oxygen Cylinder, Breathe Circuit, Carrying Package, Special Bracket for ambulance and pressure reducing valve for large oxygen cylinder, etc.

►► Technical Specifications

PARAMETER	SPECIFICATION			
Modes	C, A/C, SIMV, SIGH, CPAP, PEEP			
Tidal Volume	Range	50--2000ml	Remark	Digital Precise Adjustable
Respiratory Rate		1--100bpm		
O ₂ %		45--100%		
Trigger Level		-20--0hpa		
Peak Pressure		0--60hPa		
PEEP		0--20hPa		
SIGH		1--10 times per 100 breath		
MONITOR				
Large LCD Screen Data Display	Tidal Volume, O ₂ %, Sigh, Respiratory Rate, Flow, Pressure (Synchronized Trigger, Peak Airway, CPAP, PEEP)			

	Airway Pressure Time Waveform Display
Alarm Data Display	High/Low Airway Pressure Alarm, Lack of Gas/Power Alarm, Parameter Error
Other Display	Lock, Charge Indicator, Inspiratory/Expiratory Situation, DC/AC Power Supply
SPECIAL SELF-TEST	
Circuit Connect Prompt	Remind the operator to connect the breath circuit correctly to access the using state
Sound Alarm Test	Test sound alarm, to guarantee the reliability using.
Gas Pressure Test	Test gas pressure, remind operator to ensure the gas pressure supply.
Internal Battery Capacity Test	Test the capacity of the internal battery
Circuit Leakage Test	Test Circuit Leakage, to lest circuit drop off or leak and unexpected situation to happen
ALARMS	
High Airway Pressure	
Low Airway Pressure	
Low Battery Voltage Alarm	
Low Gas Pressure	
Parameter Error	
Parameter Error	

V-3201 Ventilator



►► Technical Specifications

PARAMETER	SPECIFICATION	
Display Mode	High-definition 5.7” LCD screen display	
Ventilation Mode	IPPV, SIPPV, SIMV, PEEP, MANUAL, SIGH	
Ventilation Parameters	Tidal Volume	50~1500ml
	Rate	2~99bpm
	SIMV Rate	2~20bpm
	I:E	2:1~1:8
	PEEP	0~2.0kPa
	Pressure Range	1.0~6.0kPa
	SIGH	1.5 times the inspiratory time
Parameters for Ventilation Monitoring	Tidal volume, ventilation volume, IPPV rate, SIMV rate, total respiratory rate, I/E, peak pressure of airway, pressure - time waveform, flow rate – time waveform, PEEP, inspiratory trigger pressure.	
Power	AC 220V±10% 50Hz±1Hz; UPS, Storage battery	
	Mechanical Arms	
SECURITY ALARM SYSTEM		
Power Alarm		
Airway Pressure Alarm	Upper Limit Setting Range	1.0~6.0kPa
	Low Limit Setting Range	0.4~2.0kPa
Per-minute Ventilation Volume Alarm	Upper Limit Setting Range	3.0~30L/min
	Low Limit Setting Range	1.0~10L/min
Sustained High-pressure Alarm	It will give alarm when stress have consistently been higher than 2.5kPa.	
Suffocation Alarm	It will give sound and light alarm if there is no tidal volume input for 15 seconds.	

IV-3200Y

Infant Ventilator



►► Introduction

IV-3200Y ventilator is a new-type of pneumatic-driven and electronic-controlled ventilator which is designed to meet the special needs of clinical respiratory management and respiratory therapy for infants and children with respiratory disorders. With the feature of innovative functions, convenient operation, less gas consumption, compact but reasonable structure, and outstanding safety and reliability, it is an indispensable instrument in emergency and ICU rooms, and an essential tool to rescue the life of infants and children. IV-3200Y ventilator can work with some innovative ventilation modes, e.g., constant flow mode, pressure limit mode and time cycle ventilation mode, and also supports PEEP and IMV functions.

►► Technical Specifications

PARAMETER	SPECIFICATION	
Working Mode (Ventilation Mode)	Controlled Mechanical Ventilation (CMV), Intermittent Mandatory Ventilation (IMV), Continuous Positive Airway Pressure (CPAP), Manual Ventilation (Manual).	
Inspiratory to Expiratory Ratio	1:1~1:3	
Special Order I:E Range	10:1~1:9.9	
Inspiratory Flow	3 L/min~20 L/min	
Tidal Volume Minimum	10 mL~300 mL	
Minute Volume	Max. Ventilation volume greater than 5 L/min	
Oxygen Concentration of Output Gas	21%~100%	
Ventilator System Compliance	Not greater than 3×10^{-2} mL/Pa	
Positive End-Expiratory Pressure (PEEP)	0kPa~2.0kPa	
Inhalation Safety Valve	Safety valve shall be opened when the airway pressure is within -300 Pa ~ -800 Pa	
Inspiratory Pressure	1kPa~9kPa	
Inspiratory Time	0.2s~3.0s	
Synchronous Trigger	Pressure Trigger	-1.0~0kPa (Special Order)
	Flow Trigger	0~10L (Special Order)
Maximum Safe Pressure	Not greater than 10kPa	
Continuous Positive Airway Pressure (CPAP)	0kPa~2.0kPa	
Monitoring Tidal Volume	Real-time monitoring within the adjustment range of tidal volume: < 100 mL: ± 10 mL; ≥ 100 mL: ± 15 %;	
Monitoring Oxygen Concentration	21%~100%	
Power Failure Alarm	Audible alarm sounds immediately in case of power outage and lasts at least for 120s	
Gas Source Failure Alarm	Audible and visual alarm sounds within 6s after gas source interruption occurs and lasts at least for 120s	
Airway Pressure Lower Limit Alarm Range	PEEP +0.2kPa	
Airway Pressure Upper Limit Alarm Range	Inspiratory pressure +0.4 kPa	

CPAP-3200D

Infant CPAP System



►► Application

Continuous Positive Airway Pressure (CPAP) nurtures and supports infant breathing by providing respiratory support throughout the respiratory cycle.

CPAP System maintains the infant's functional residual capacity by helping to prevent airway closure.

The CPAP-3200D System has the advantages of compact device, small footprint, saving energy and integrated high-performance in operation. This makes it an ideal companion for your smallest patients in the Neonatal Intensive Care Units (NICU), emergency ward, delivery room and other departments.

►► Trust Points

- Mobility for intrahospital transport : easy to move with 5 wheels, easy to stop with three brakes in front casters.
- Flexible configurations to suit your needs.
- Flexible configurations to suit your needs.
- International standard and advanced technology suitable for all baby patient around the world.

►► Features

- Integration breathing circuit design, ensure easy operating and keep tidy.
- Built-in air and oxygen blender ensure stable oxygen concentration.
- Reliable CPAP control valve and pressure monitoring system improve CPAP adjustment precision.

►► Safety

- Two wheels with brake, ensure stable operating.
- Pressure meter and flow meter ensure accurate adjusting of parameters.



Flowmeter



Humidifier



Pressure gauge

►► Technical Specifications

PARAMETER	SPECIFICATION
Inspiratory oxygen concentration	Adjusting range: 21% - 100%
CPAP	Adjusting range: 0cmH ₂ O - 10cmH ₂ O
Continuous flow	Adjusting range: 1.5L/min - 15L/min
Gas source	O ₂ Air
Pressure	280kPa~600kPa
Wooden case packing size (main component)	L 700*W 710*H 380mm
G.W.	35KG
N.W.	17.7KG
Wooden case packing size (Trolley)	L 160*W 195*H 1100mm
G.W.	6.7KG
N.W.	2KG
Total CBM	0.7m ³

Regulatory compliances



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