

The MCV200 Portable Ventilator

- Can be operated solely on compressed gas, DC power, or AC power, offering the greatest flexibility for mass casualty responders.
- Simple control interface allows for just-in-time training and use by a wide range of responders.
- Assist-Control, external PEEP, and independent ventilation controls accommodate enhanced treatment options.
- Low maintenance and weatherproof design ensure low cost of ownership in stockpile or in everyday use.

The MCV200 provides an additional level of preparedness when planning for an unknown medical surge. In addition to its internal battery and compressors that provide the flexibility of operation on AC or extended operation on DC power, the MCV200 also incorporates a completely pneumatic ventilation mode ensuring operation even when electricity is unavailable and all DC power sources are drained. The MCV200 is capable of providing ventilation using ambient air, high-pressure oxygen, or an oxygen/air mix. Like the MCV100, the MCV200 features intuitive ventilation controls and an array of adjustable alarms to enhance patient safety. The unique power source flexibility of the MCV200 combined with a rugged, weather-resistant and low-maintenance design ensures the greatest level of preparedness for mass casualty planners.



Specifications - MCV200, MCV200-B

Setting Parameters

Ventilation Mode: Assist-Control
Assist-Control: Triggers at less than -2 cm H₂O
Flow Rate: 12-36 LPM
Breathing Rate: Adjustable. 0, 8-20 breaths per minute
Tidal Volume: Adjustable. 200-1200 ml
Inspiratory Time: 1 or 2 seconds
PEEP: External. 0-20 cm H₂O (with PEEP adapter)
FiO₂: Selectable. 21%, 65%, 100%
Manometer Readout: Digital. 0-60 cm H₂O
Airway Pressure Limit: Adjustable. 5-60 cm H₂O

Alarms

High Airway Pressure: Adjustable. 15-60 cm H₂O
Low Airway Pressure/Disconnect: Adjustable. 0-30 cm H₂O
Low Source Gas: Fixed. Activates at about 40 psi (275 kPa)
Low Battery: Activates when approx. 1½ hours of run time remain
Alarm Volume: Approx. 60 dB at 1 meter
Alarm Silence: Yes. 110 Seconds

Power Characteristics

Power Source: Compressed O₂, 110V-240V AC, internal battery, external 12V DC battery
O₂ Supply Pressure: 40-87 psi
Operating Time on Battery:
Based on average adult settings of 10 BPM, 600 ml tidal volume, 2 second inspiratory time
Air Mode (using internal compressors): Approx. 7 hours
100% O₂ or 65% O₂ Mode: Approx. 21 hours
Internal Battery: 12 Volt 5 Ah Rechargeable. Sealed lead acid type
Battery Recharge Time: 5 hours (less than 24 hours when in use)
Battery Shelf Life: 3 years

Physical Characteristics

Dimensions: 3.5" x 10.3" x 14.5" (88.9 mm x 261.1 mm x 368.3 mm)
Weight: 17.2 lbs. (7.8 kg)
Temperature Ranges:
Operating: -15 to 122°F (-9 to 50°C)
Storage: -40 to 140°F (-40 to 60°C)
Enclosure: ABS plastic with seals to prevent water ingress
Shock Resistance: 30" drop
Vibration Resistance: 100 G
Water Resistance: Spill and rain resistant

