EMV+® 731 Series Specifications  
(software version 5.22)

Clinical Specifications
- **Operating Modes**: AC, SIMV, CPAP, BPL
- **Breath Target**: Volume and pressure
- **Special Functions**: Plateau Pressure, Manual Breath, Apnea Backup, Oxygen in Use, Inverse Ratio
- **Flow Rate**: 0 to 100 LPM @ 40 cm H₂O
- **Breath Rate**: 1 to 80 BPM
- **Tidal Volume**: 50 to 2000 ml ATPD ± 10% of setting
- **Inspiratory Time**: 0.3 to 5.0 seconds
- **I:E Ratio**: 1:99 to 4.0:1.0
- **FiO₂**: 21 to 100% ± 3% of full scale ± 10% of setting
- **PEEP**: 0 to 30 cm H₂O
- **Pressure Support**: 0 to 60 cm H₂O
- **Peak Inspiratory Pressure (PIP)**: 10 to 80 cm H₂O
- **Trigger Sensitivity**: -0.5 to -8.0 cm H₂O
- **Oxygen Input Pressure**: 55 psig (~25%; + 20%) (380 kPa)

Safety Specifications
- **Airway Pressure High Limit**: 20 to 100 cm H₂O values
- **Airway Pressure Low Limit**: Off, 3 to 35 cm H₂O
- **BPM High Alarm Limit**: Off, 2 to 99
- **BPM Low Alarm Limit**: 2 to 40
- **LED Status/Alarm Indicator**: Red, yellow, and green LCD/LED adjustable

Environmental
- **Operating Voltages**: 100 to 240 VAC (50/60 Hz) or 12.5 to 28.0 VDC
- **Operating Time**: Internal battery 10 hours
- **Temperature Ranges**: Operating: -25° to 49°C (-13° to 120°F) with battery charging, battery discharge and AC power operation
- **Battery Charging**: 0° to 45°C (32° to 113°F)
- **Altitude Compensation**: Automatic -2,000 to 25,000 ft (-601 to 7,620 meters)
- **AWR Certified**: Approved for most U.S. Military aircraft
- **Temperature and Humidity Testing**: MIL STD 810F
- **Ingress Testing**: MIL STD 810 F
- **Shock and Vibration Testing**: MIL STD 810F
- **Altitude Testing**: MIL STD 810F
- **Military Vehicle Power**: MIL STD 1275 F

General
- **Size**: 8.0” wide x 12.5” high x 4.5” deep (20.3 cm wide x 31.8 cm high x 11.4 cm deep)
- **Weight**: 9.7 lbs (4.4 kg)

Full Patient Range
- For patients from infant (≥ 5 kg) through adult

Smart Help™ Display
- Guides operator through on-screen commands when responding to alarms

Versatility with Standard Military Equipment
- Functions with deployed oxygen concentrator systems used by the military

Unprecedented Battery Run-Time
- No additional battery back-up needed thanks to 10-hour battery run-time. Battery recharges to 90% in 2 hours.

AWR Certified
- Airworthiness Release certified. Approved for use during all phases of flight aboard both fixed-wing and rotary-wing U.S. Air Force and Army aircraft.

Silent and Dark Mode
- Can be switched to a silent and dark mode, preventing it from interfering with advanced infrared night-vision equipment

Rugged, All-Weather Device
- Designed for the unique needs of the military to handle austere environments. Meets an unprecedented set of military standards.

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