**CONTROLS AND FEATURES**

**Patient Selection:** Pediatric/Infant - adult

**Breath Types/Modes:**
- Volume Control (VC)
- Pressure Control (PC)
- Volume Target Pressure Control (VTPC)
- Biphasic Pressure Release Ventilation (BPRV)
- Assist/Control Mandatory Ventilation (A/CMV)
- Synchronized Intermittent Mandatory Ventilation (SIMV)
- Spontaneous (SPONT)
- Noninvasive Ventilation (All breath types/modes)

**Spontaneous Breath Choices:**
- Pressure Support (PS)
- Volume Target Pressure Support (VTPS)

**Backup Ventilation:** All modes

**Slope/Rise:** Automatic or manual adjustment 1-19 for PC, VTPC, PS and VTPS breaths

**Pressure Support:**
- Pediatric/Infant: 0 to 50 cmH2O/mbar
- Adult: 0 to 60 cmH2O/mbar

**FlexCycle Expiratory Threshold:**
- Automatic or manual adjustment 5% to 55% peak flow for PS and VTPS

**Tidal Volume:**
- Pediatric/Infant: 5 to 1,000 mL
- Adult: 100 to 3,000 mL

**Resp Rate (Frequency):**
- Pediatric/Infant: 1 to 150 b/min
- Adult: 1 to 80 b/min

**Flow:**
- Pediatric/Infant: 1 to 100 L/min
- Adult: 1 to 180 L/min

**Flow Wave Pattern:** Square or descending ramp

**Pause:** Off, 0.1 to 2.0 seconds

**Sigh:** Delivers one sigh breath every 100 breaths, sigh VT = 1.5 X VT setting

**Pressure Limit:**
- Pediatric/Infant: 0 to 70 cmH2O/mbar
- Adult: 0 to 80 cmH2O/mbar

**Inspiratory Time:**
- Pediatric/Infant: 0.1 to 3.0 seconds
- Adult: 0.1 to 5.0 seconds

**I:E Ratio:** Max inverse 4:1

**Trigger (sensitivity)**
- P-Pressure Trigger: 0 to -5 cmH2O/mbar
- Flow Trigger: Pediatric/Infant: 0.1 to 2.0 L/min
  Adult: 0.6 to 2.0 L/min

**FiO2 (oxygen concentration):** 0.21 to 1.00

**PEEP/CPAP (Pbase):**
- Pediatric/Infant: 0 to 30 cmH2O/mbar
- Adult: 0 to 45 cmH2O/mbar

**Leak Compensation (automatic):**
- Pediatric/Infant: 8 L/min max
  Adult: 15 L/min max

**Bias Flow:** 3 L/min

**Manual Inflation:** 5 seconds max

**O2 (3 minutes):** Delivers 100% oxygen for 3 minutes

**Ideal Weight:** 1-375 kg

**Display Brightness:** Adjustable display backlight

**Language Selection:** For display messages and screen text

**Pressure Units:** cmH2O/mbar

**Circuit Type Compensation:**
- Heated expiratory limb, heated inspiratory limb, HME or test lung

**Altitude Compensation:**
- 0-4,000 m/13,124 ft (200 m/656 ft increments)

**Compliance Compensation:**
- On/off (Volume Control)

**RS-232 Comm Protocol:** Communication protocol selection for remote monitoring

**Calibrate Sensor:** Exhalation flow and oxygen sensors

**Date/Time:** Adjust and format

**MONITORED PARAMETERS**

| Parameter | Value
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Peak</td>
<td>Cdyn effective</td>
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<tr>
<td>V,E % variance</td>
<td>I:E ratio</td>
</tr>
<tr>
<td>Exp flow</td>
<td>RR spont</td>
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<tr>
<td>Pplat</td>
<td>Cstat</td>
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<tr>
<td>MV</td>
<td>R1</td>
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<tr>
<td>I:E ratio</td>
<td>RSBI</td>
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<tr>
<td>pmean</td>
<td>R1</td>
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<tr>
<td>MV</td>
<td>MV1</td>
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<tr>
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<tr>
<td>PEEP</td>
<td>V1,E</td>
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<tr>
<td>MV, spont</td>
<td>Time constant</td>
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<tr>
<td>FiO2</td>
<td>Total PEEP</td>
</tr>
<tr>
<td>P0.1</td>
<td>NIF</td>
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</tbody>
</table>

**GRAPHICS**

- **Waves:** Pressure/time, Volume/time
- **Loops:** Volume/pressure, Flow/volume

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Not for distribution in the U.S.
AUDIBLE AND VISUAL ALARMS
Adjustable Alarms (via Graphical User Interface)
- Low MV (exp. minute volume)
- High RRtot (resp rate)
- Low MV (exp. minute volume)
- Apnea delay time
- Low Paw (airway pressure)
- Disconnect (threshold %)
- High Paw (airway pressure)
- Low Paw below Pbase
- Disconnect (threshold %)
- High Paw (airway pressure)
- Apnea delay time
Automatic Alarms
- (Settings) out of range
- Low and high FiO2
- Pressure limit below Pbase
- Sustained high baseline pressure
- I:E ratio inverse violation
- Low and high baseline (PEEP) pressure
- Volume target not met

ALARMS FEATURES
Alarm Silence: Mutes audible alarms for 120 seconds
Backup Vent: Backup ventilation supplied in response to low MV, alarm
O2 Sensor: O2 sensor error/O2 sensor disconnect
Flow Sensor: Flow sensor error
Gas Supply Alarms: Loss of one gas supply/loss of both gas supplies
Power Fail Alarms: Loss of AC power/low internal battery
Power Down Alarm: Audible only
Device Alert: Indicator lights and messages are displayed
Check Vent Fan: Cooling fan failure
Suction Disconnect Function: Pre-silences alarms for 120 seconds, suspends ventilation after a planned disconnect and senses reconnection to resume ventilation
Alarm Reset: Clears visual indicators and messages

DIMENSIONS
Width: 13.9 in. (35.3 cm)
Depth: 13.9 in. (35.3 cm)
Height: 12.1 in. (30.7 cm)
Weight: 38 lbs (17.3 kg)

ENVIRONMENTAL
Operating:
Relative humidity: 10% to 95% Rh non-condensing
Altitude: 0 to 13,124 feet (0 to 4,000 meters)
Pressure: 21 to 31 in. Hg (700 to 1,060 hPa)

Storage:
Ambient temperature: -20 to 60 °C (-68 to 140 °F)
Relative humidity: 10% to 95% Rh non-condensing
Altitude: 0 to 18,000 feet (0 to 5,500 meters)
Pressure: 15 to 31 in. Hg (500 to 1,060 hPa)