

A cost-effective approach to superior ventilation



Features include:

- SmartVent ventilator
- Patient breathing system with circle module
- O₂ and N₂O gas delivery
- Lockable drawer
- Light strip
- low flow anesthesia
- Open, flexible architecture
- One-year warranty

Optional items:

- Two or three Vaporizers
- 7100 Ventilator
- Air or CO₂
- Air-flow tube: single or dual
- Cylinder yokes: up to four on a two-vaporizer system, five on a three-vaporizer system
- Auxiliary common gas outlet
- Bain module
- Integrated suction (central or Venturi)
- Integrated auxiliary O₂ flowmeter
- Silicone breathing circuit kits

The Aestiva®/5 offers exceptional capabilities and flexibility, giving you a cost-effective approach to anesthesia therapy.

The Aestiva®/5 with SmartVent offers you selected capabilities of an intensive care ventilator, saving you the cost of bringing a separate ICU ventilator into the OR. Its flexible ergonomic design and intuitive operations enhance SmartVent's capabilities to give you a higher level confidence and control. In addition, the Aestiva®/5 provides an optimized

system for the practice of low and minimal flow anesthesia, minimizing agent consumption to save on anesthetic agent costs.

The Aestiva®/5 open architecture gives you the flexibility to use your current monitors and data management systems, helping you stay within your budget while achieving physical integration in one unit. The Aestiva®/5 also has built-in service diagnostics making service support easy and cost efficient.

Features

- Superior ventilation: 7900 SmartVent™
- Volume Mode, pressure
- Volume Mode, Pressure Control Mode, Pressure Support, (PSVPro®), Synchronized Intermittent Mandatory Ventilation (SIMV), electronic PEEP
- Tidal volume compensation
- One motion from mechanical to manual mode
- Two key presses to total standby: end case
- Cardiac bypass case mode
- Open systems architecture
- Innovative patient breathing system
- Improved low flow/reduced life cycle costs

Physical Specifications

	<i>2 vaporizer configuration</i>	<i>3 vaporizer configuration</i>
• Height:	135.8 cm/53.4 in	135.8 cm/53.4 in
• Width:	75 cm/29.5 in	93 cm/36.6 in
• Depth:	83 cm/32.7 in	83 cm/32.7 in
• Weight:	Approximately 136 kg/300 lb	Approximately 154 kg/340 lb

Top shelves (optional)	<i>2 vaporizer configuration</i>	<i>3 vaporizer configuration</i>
• Wt lmt:	46 kg/100 lb	46 kg/100 lb
• Width:	47.5, 67.5, 87.5 cm/18.7, 26.6, 34.4 in	87.5, 67.5 cm/34.4, 26.6 in
• Depth:	41 cm/16.1 in	41 cm/16.1 in

- Work surface**
- Height: 87.6 cm/34.5 in
 - Width: 47 cm/18.5 in
 - Depth: 31.5 cm/12.4 in

- Folding side shelf (optional)**
- Height: 87.5 cm/34.5 in
 - Width: 26.5 cm/10.4 in
 - Depth: 31.5 cm/12.4 in
 - Wt lmt: 11.3 kg/25 lb

- Top drawer (1 standard)—locking (internal dimensions)**
- Height: 10.5 cm/4.1 in
 - Width: 38.5 cm/15.2 in
 - Depth: 26 cm/10.2 in

Absorber arms	<i>Adjustable</i>	<i>Non-adjustable</i>
• Arm:	30.5 cm/12 in	25.4 cm/10 in
• Bag arm height:	87 cm/34.3 in	91.5 cm/36 in
	104 cm/40.9 in	
• Absorber rotat.:	85°	85°

- Ventilator screen**
- Height: 7.6 cm/3 in
 - Width: 15.2 cm/6 in

- Casters**
- Diam.: 12.5 cm/5 in
 - Brakes: Single foot lever locks and unlocks two front casters

Ventilator operating specifications

- Volume Control
- Pressure Control
- Synchronized Intermittent Mandatory Ventilation (SIMV); Pressure Support (PSVPro) with Apnea Backup ventilation — (optional)

- Ventilator (VT) parameter ranges**
- Tidal volume range: 20 to 1500 mL (Volume Control and SIMV modes) 5 to 1500 mL (Pressure Control Mode)
 - Incremental settings: 20 to 100 mL (increments of 5 mL) 100 to 300 mL (increments of 10 mL) 300 to 1000 mL (increments of 25 mL) 1000 to 1500 mL (increments of 50 mL)
 - Minute volume range: 0 to 99.9 L/min
 - Pressure ($P_{inspired}$) range: 5 to 60 cm H₂O (increments of 1 cm H₂O)
 - Pressure (P_{limit}) range: 12 to 100 cm H₂O (increments of 1 cm H₂O)
 - Pressure ($P_{support}$) range: Off, 2 to 40 cm H₂O (increments of 1 cm H₂O)
 - Rate: 4 to 100 breaths per minute for Volume Control and Pressure Control; 2 to 60 breaths per minute for SIMV, PSVPro and SIMV-PC+PSV (increments of 1 breath per minute)
 - Inspiratory/expiratory ratio: 2:1 to 1:8 (increments of 0.5)
 - Inspiratory time: 0.2 to 5.0 seconds (increments of 0.1 seconds) (SIMV and PSV Pro)
 - Trigger window: 0 to 80% (increments of 5%)
 - Flow trigger: 0.2 to 1.0 L/min (increments of 0.2 L/min) 1 to 10 L/min (increments of 0.5 L/min)
 - Inspiration termination level: 5 to 75% (increments of 5%)
 - Backup mode delay: 10 to 30 seconds (increments of 5 seconds)

- Positive End Expiratory Pressure (PEEP)**
- Type: Integrated, electronically controlled
 - Range: OFF, 4 to 30 cm H₂O (increments of 1 cm H₂O)

- Ventilator performance**
- Pressure range at inlet: 240 kPa to 700 kPa/ 35 psig to 100 psig
 - Peak gas flow: 120 L/min + fresh gas flow
 - Flow valve range: 1 to 120 L/min
 - Flow compensation range: 200 mL/min to 15 L/min

- Ventilator monitoring**
- Expiratory minute volume range: 0 to 99.9 L/min
 - Expiratory tidal volume range: 0 to ³1500 mL
 - O₂ %: 5 to 110%
 - Peak pressure: -20 to 120 cm H₂O
 - Mean pressure: -20 to 120 cm H₂O
 - Plateau pressure: 0 to 120 cm H₂O
 - Pressure waveform 4 to 25 breaths per minute sweep speed: (0 to 15 seconds) 26 to 75 breaths per minute (0 to 5 seconds) 75 breaths per minute (0 to 3 seconds)

Ventilator accuracy

- Delivery/monitoring accuracy**
- Volume delivery: > 210 mL = better than 7% < 210 mL = better than 15 mL < 60 mL = better than 10 mL
 - Pressure delivery: ±10% or ±3 cm H₂O
 - PEEP delivery: ±1.5 cm H₂O
 - Volume monitoring: > 210 mL = better than 9% < 210 mL = better than 18 mL < 60 mL = better than 10 mL
 - Pressure monitoring: ±5% or ±2 cm H₂O

Alarm settings

- Tidal volume (VTE): Low: OFF, 0 to 1500 mL High: 20 to 1600 mL, OFF
- Minute volume (VE): Low: OFF, 0 to 10 L/min High: 0 to 30 L/min, OFF
- Inspired oxygen (FiO₂): Low: 18 to 100% High: 18 to 100%, OFF
- Apnea alarm: Mechanical ventilation ON: < 5 mL breath measured in 30 seconds Mechanical ventilation OFF: < 5 mL breath measured in 30 seconds
- Low airway pressure: 4 cm H₂O above PEEP
- High pressure: 12 to 100 cm H₂O (increments of 1 cm H₂O)
- Sustained airway pressure: Mechanical ventilation ON: $P_{limit} < 30$ cm H₂O, the sustained limit is 6 cm H₂O $P_{limit} 30$ to 60 cm H₂O, the sustained limit is 20% of P_{limit} $P_{limit} > 60$ cm H₂O, the sustained limit is 12 cm H₂O **PEEP and mechanical ventilation ON:** Sustained limit increases by PEEP minus 2 cm H₂O **Mechanical ventilation OFF:** $P_{limit} < 60$ cm H₂O, the sustained limit is 50% of P_{limit} $P_{limit} > 60$ cm H₂O, the sustained limit is 30 cm H₂O
- Subatmospheric pressure: Paw < -10 cm H₂O
- Alarm silence countdown timer: 120 to 0 seconds

Ventilator components

- Flow transducer**
- Type: Variable orifice flow sensor
 - Dimensions: 22 mm OD and 15 mm ID
 - Location: Inspiratory outlet and expiratory inlet
 - Optional autoclavable sensor available

- Oxygen sensor**
- Type: Galvanic fuel cell
 - Life cycle: Approximately 18 months (dependent on usage)

- Anesthetic agent delivery**
- Vaporizers: Tec 4, Tec 5, Tec 6 Plus, Tec 7
 - Number of positions: 2 or 3
 - Mounting: Tool-free installation Selectatec® manifold interlocks and isolates vaporizers

