



The **Vyaire CareFusion Avea** provides comprehensive critical care ventilation for the smallest patients in the NICU to children and adults with complex respiratory diseases. The Vyaire Avea ventilator features invasive and noninvasive ventilation for all patients types, volumetric capnography and transpulmonary pressure monitoring. The Avea also has front panel connection ports are provided for esophageal balloon catheters, tracheal catheters, and proximal low sensors.

## Features

- Precision gas delivery system supplies accurate volumes.
- Active exhalation valve on the AVEA ventilator promotes ventilator synchrony and comfort for your patients.
- Volumetric Capnography gives clinicians more accurate tools to aid in quicker reaction during critical situations.
- Accurate esophageal pressure measurements.



# Specifications

## Dimensions

**Pneumatic Module:** 10.5" h x 16.75" w x 16" d (26.7 cm x 43.2 cm x 40.6 cm)  
**User interface Module:** 13.75" h x 16.25" w x 2.5" d (35 cm x 41.3 cm x 6.4 cm)  
**Viewable Size:** 12.1" (diagonal)  
**Resolution:** 800 x 600

## Weight

**Ventilator** (includes user interface module): 83 lb (37.6 kg)  
**Ventilator and compressor** (internal): 90 lb (40.8 kg)

## Battery

1 hr of ventilator use on internal battery (standard) or 30 minutes ventilator and compressor  
 4 hr of ventilator use on external battery or 2 hr ventilator and compressor

## Primary Settings

**Rate:** 1–150 bpm (neonatal, pediatric), 1–120 bpm (adult)  
**Tidal Volume:** 2.0 mL–2.5 L  
**Inspiratory Pressure:** 0–80 cmH<sub>2</sub>O (neonatal), 0–90 cmH<sub>2</sub>O (adult, pediatric)  
**Peak Flow:** 0.4–150 L/min  
**Inspiratory Time:** 0.15–5.0 sec  
**Pressure Support Ventilation (PSV):** 0–80 cmH<sub>2</sub>O (neonatal), 0–90 cmH<sub>2</sub>O (adult, pediatric)  
**PEEP:** 0–50 cmH<sub>2</sub>O  
**Flow Trigger:** 0.1–20 L/min  
**O<sub>2</sub>:** 21–100%  
**Pressure High** (in APRV/BiPhasic mode): 0–90 cmH<sub>2</sub>O  
**Time High** (in APRV/BiPhasic mode): 0.2–30 sec  
**Time Low** (in APRV/BiPhasic mode): 0.2–30 sec  
**Pressure Low** (in APRV/BiPhasic mode): 0–45 cmH<sub>2</sub>O

## Advanced Gas Blending System

**Air/oxygen Blending:** 21–100%  
**Internal Heliox Blending System:** All concentrations from 80/20 helium/oxygen to 0/100 helium/oxygen

## Advanced Patient Monitoring

Proximal hot wire flow sensor  
 24-hour trending of monitored respiratory parameters  
 Volumetric capnography



## Specifications Continued

### Maneuvers

**AutoPEEP Airway:** 0–50 cmH<sub>2</sub>O (*automated*)

**MIP/P100:** -60 to 120 cmH<sub>2</sub>O (*automated*)

**Slow Flow (Pflex):** Automated

### Advanced Settings

**Bias Flow:** 0.4–5.0 L/min

**Volume Limit:** 2.0 mL–2.5 L

**Inspiratory Rise:** 1–9

**Flow Cycle:** Off to 45%

**PSV Rise:** 1–9

**PSV Cycle:** 5–45%

**PSV TMAX:** 0.15–5.0 sec

**Waveform:** Square, decelerating

**Sigh:** On/Off\*

**Pressure Trigger:** 0.1–20 cmH<sub>2</sub>O

**Demand Flow:** On/Off

**Volumetric Capnography:** EtCO<sub>2</sub> averaging 1 or 8 breaths, VCO<sub>2</sub> averaging 3, 6, 9 or 12 minutes

### Modes

**Mode Type:** A/C, SIMV, CPAP/PSV, NPPV, nCPAP/IMV

**Breath Type:** APRV/BiPhasic, Volume, Pressure, TCPL, PRVC, Volume Guarantee

**Apnea Backup:** Volume, Pressure, TCPL

### Manual Controls

**Manual Breath:** One breath

**Expiratory Hold:** Max. 20 sec (*adult, pediatric*), 3 sec (*neonatal*)

**Inspiratory Hold:** Max. 3 sec

**Increase O<sub>2</sub>:** Set percentage O<sub>2</sub> + 0–79% O<sub>2</sub>

**Synchronized Nebulizer:** Available when delivered flow ≥ 15 L/min

**Disconnect for Suction:** Active

