

Exceptional design and intuitive functionality

The Prima SP2 features a touchscreen ventilator, autoclavable absorber and accurate Penlon vaporizers

- » Advanced, easy-to-use features for maximum patient safety
- » Fully-loaded specifications as standard
- » Two-vaporizer station as standard
- » Six ventilation modes
 1. Spontaneous
 2. Volume
 3. Pressure
 4. Pressure Support
 5. SIMV
 6. SMMV
- » Large color touchscreen
- » Low cost of ownership—only two preventive maintenance service visits per year
- » Flexible and sophisticated for all your anesthesia needs



Integrated design and superior build quality

- High levels of workstation integration
- Modular construction
- GCX™ mounting rails for superior mounting solutions
- Dual oxygen, nitrous oxide and air flowmeters
- Two oxygen, one nitrous oxide and one air yoke
- Open architecture for monitors and accessories
- Many monitoring shelf configurations available
- Three station Selectatec® back bar
- Flowmeter and work surface lighting
- Four electrical outlets
- Oxygen auxiliary flowmeter

Balanced ultra low-flow anesthesia and a proven mechanical anti-hypoxic device

- Specifically designed for low flow
- 50–75 ml/min minimum oxygen flow
- 27–33% minimum Oxygen/Nitrous Oxide flow

AV-S Multi-Mode Ventilator

- Easy-to-use and designed for all patient profiles
- Volume, PCV, PSV, SIMV and SMMV modes

A200SP Absorber

- Advanced system integration, easy to use and high performance
- Provides seamless ventilation mode switching

Sigma Delta Vaporizer

- Delivers accurate concentrations

Sigma Alpha Vaporizer

- Suprane® (Desflurane) delivery solution

Technical Specifications

Prima SP2 Anesthesia System

Physical

Size (H x W x D)	54" x 28.4" x 31.5" (1370 x 720 x 800 mm)
Weight	165.4 lb (75 kg)
Top Shelf	28.4" x 18.9" (720 x 480 mm)
Work Surface	25.6" x 11.8" (650 x 300 mm)
Drawers (up to three)	7.5" x 20.5" x 15.4" (190 x 520 x 390 mm)

Features

Number of Vaporizers	2
Gases	Oxygen, Nitrous Oxide, Air
Cylinder Yokes	Four
Oxygen Fail Safe	Yes
Anti-Hypoxic Device	Mechanical, 27 to 33%
Standards	All relevant

AV-S Multi-Mode Ventilator

Physical

Size, Control Unit Only (H x W x D)	7.3" x 11.4" x 11.8" (185 x 290 x 300 mm)
Size with Adult Bellows (H x W x D)	15.2" x 11.4" x 11.8" (385 x 290 x 300 mm)
Weight (Control Unit)	16.8 lb (7.6 kg)
Weight (w/Adult Bellows)	19.8 lb (9.0 kg)
Screen (TFT)	8.4 inches (210 mm)
Bellows (Latex-Free)	20 to 1600 ml
Bellows (pediatric option)	20 to 350 ml
Power	90 to 264 VAC, 47 to 63 Hz
Drive Gas	Oxygen or Air

Functions

Tidal Volume (Vt)	20 to 1600 ml
Rate (BPM)	4 to 100 bpm
Sigh Mode	Tidal Volume (Vt) x 1.5, every 50 breaths
I:E Ratio	1:0.3 to 1:8
Pressure Limit	10 to 80 cmH ₂ O
Fresh Gas Compensation	Automatic Tidal Volume Adjustment
Ventilation Modes	Off, Standby, Volume, Pressure Controlled, Spontaneous, SIMV, SMMV, PSV (for use in anesthesia procedures only)
Pressure Control	10 to 70 cmH ₂ O
Spontaneous Mode	Active Volume and Pressure Alarms, Patient Support Function—Automatic switch to Volume Cycle Mode if apnea alarm is triggered
Electronic PEEP	4 to 30 cmH ₂ O
Oxygen Monitor	Fuel Cell type

SIMV, SMMV, PSV

Trigger	0.2 to 0.4 L/min
Trigger Window	60% of Expiratory Time
Tidal Volume	As Volume Mode
Minute Volume	As Volume Mode
Inspiratory Time	0.5 to 5 secs
Support Pressure	3 to 20 cmH ₂ O (PEEP referenced)

Alarms—Automatic

Alarm Mute	30 seconds
Low Drive Gas Pressure	Less than 235 kPa (34 psi)
High Cont. Airway Press	Above 30 cmH ₂ O at start of cycle
Low Pressure	4 to 14 cmH ₂ O (PEEP referenced)
Low Tidal Volume	50% of Volume set (spirometry)
Incorrect Rate or Ratio, Mains Failure	30 minutes battery backup
Low Battery	5 minutes use
Vent Inop	Internal or Battery Failure

AV-S Multi-Mode Ventilator continued

Alarms—optional, user set

Tidal Volume—Minimum	0 to 1600 ml
Tidal Volume—Maximum	20 to 1600 ml
Minute Volume—Minimum	0 to 10 L
Minute Volume—Maximum	0 to 30 L
Apnea	Adjustable Reset Pressure (PEEP Ref) 3 to 35 cmH ₂ O
Low and High O ₂ Concentration	18% to 105%
High Airway Pressure	10 to 80 cmH ₂ O adjustable

Default Settings

	Adult	Pediatric
Volume, Tidal Volume (Vt):	600 ml	150 ml
Volume, Rate (BPM):	10	15
Volume, I:E Ratio:	1:2	1:2
Volume, Pmax:	38 cmH ₂ O	38 cmH ₂ O

Pressure, Tidal Volume (Vt):	600 ml	150 ml
Pressure, Rate (BPM):	10	15
Pressure, I:E Ratio:	1:2	1:2
Pressure, P-Target:	10 cmH ₂ O	10 cmH ₂ O

SIMV, Tidal Volume (Vt):	600 ml	200 ml
SIMV, Rate (BPM):	6	10
SIMV, Inspiratory Time:	2 sec	1 sec
SIMV, Trigger:	0.4 L/min	0.4 L/min

SMMV, Minute Volume (Vt):	3.6 L	2 L
SMMV, Rate (BPM):	6	10
SMMV, Inspiratory Time:	2 sec	1 sec
SMMV, Trigger:	0.4 L/min	0.4 L/min

PSV, Support Pressure:	10 cmH ₂ O	10 cmH ₂ O
PSV, Inspiratory Time:	2 sec	1 sec

A200SP Absorber

Physical

Size (H x W x D)	16.6" x 9.0" x 16.9" (420 x 230 x 430 mm)
Weight (empty)	33 lb (15 kg)
Absorbent Capacity	2.9 lb (1.3 kg)

Sigma Delta and Alpha Vaporizer

Physical

	Sigma Delta	Sigma Alpha
Weight:	Approx. 5 kg	Approx. 6 kg
Capacity:	Volume at MAX mark: 250 ml nominal Volume at MIN mark: 35 ± 10 ml	330 ml working volume 70 ml refill indicator

Note: After draining, approximately 60 ± 10 ml of liquid is retained by the wick

Operating Flow Range:	0.2 to 15 liters / min	0.5 to 10 liters / min
Operating Temperature Range:	15 to 35°C (58 to 95°F)	18 to 30°C (64 to 86°F)

Size (H x W x D)

Cagemount Dimensions	8.6" x 5.2" x 6.2" (219 x 133 x 158 mm)
Selectatec® Compatible w/	
Interlock Dimensions	9.5" x 4.7" x 7.5" (242 x 120 x 190 mm)
Dräger Plug-In® Compatible Dim.	9.5" x 3.9" x 7.5" (242 x 100 x 190 mm)