



# Improved patient care is now automatic

Philips Respironics BiPAP AvAPS automatically delivers optimal therapy even as patient needs change. And even if you are miles away

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# Better patient care It's automatic.



When a therapy device takes patient care to the next level, it's an important advancement. When it can also recognize changing patient needs and automatically make adjustments, it's revolutionary. Philips Respironics BiPAP AVAPS and BiPAP S/T are noninvasive ventilation devices developed to help you provide better, more efficient care for patients, including children as young as seven years of age and who weigh more than 40 pounds. And who better to bring it to you than the innovators in noninvasive (NIV) bi-level therapy for the home.

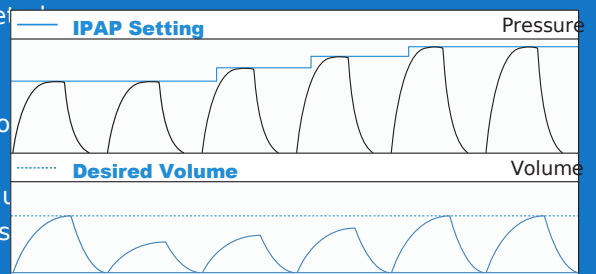




# AVAPS – advanced technology that simplifies patient care

It's the only way of ensuring the delivery of target tidal volume for your NIV patients. Shorthand for "Average Volume Assured Pressure Support," AVAPS sets the standard in noninvasive ventilation.

The exclusive AVAPS algorithm automatically adjusts pressure support to meet changing patient needs while maintaining a target tidal volume.



<sup>1</sup> The AVAPS feature is not available on the BiPAP S/T ventilator.

# Exclusive benefits for your patients... and for you

## AVAPS:

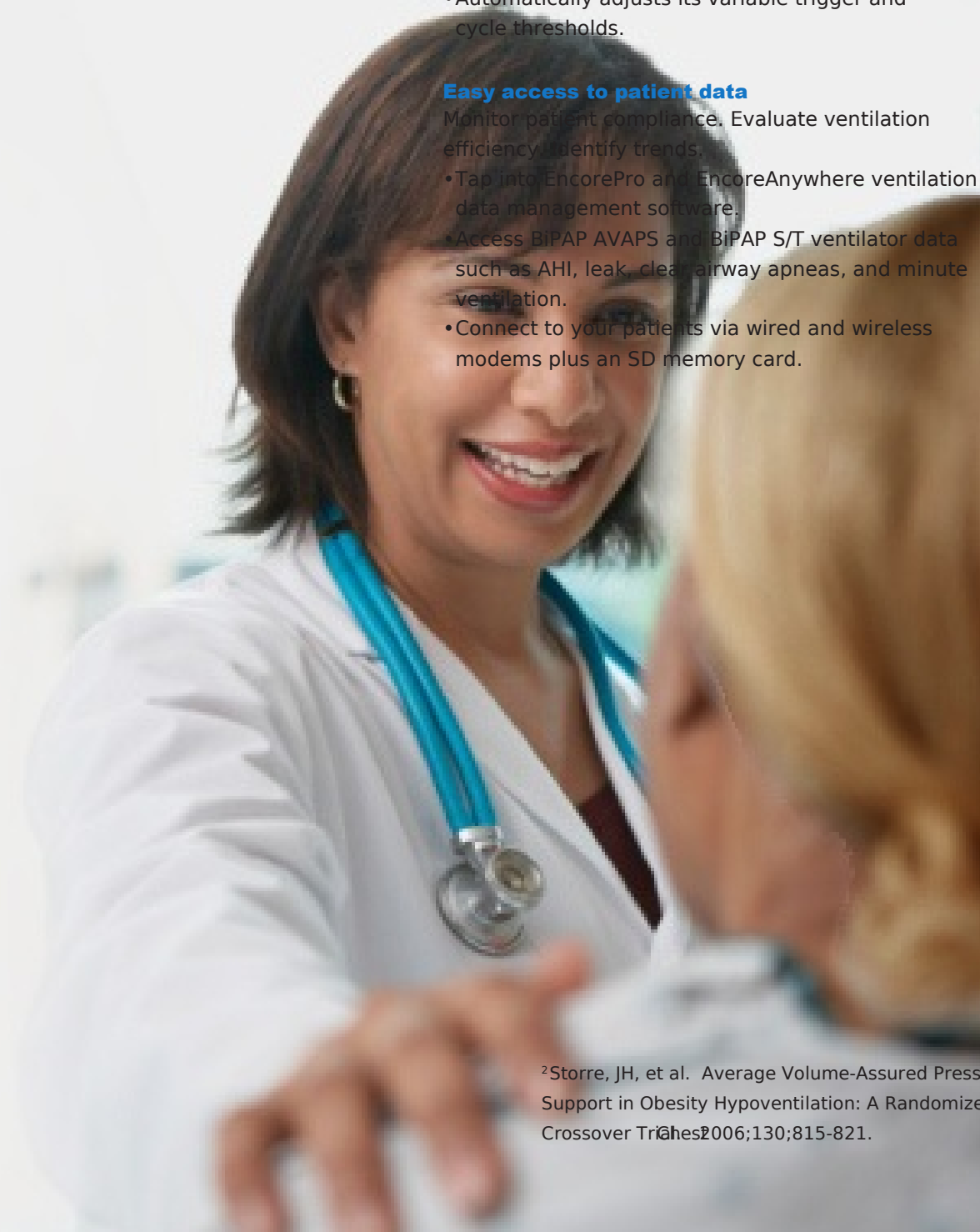
- Automatically adapts to disease progression and changing patient needs.
- Maintains optimal patient comfort without compromising patient care and efficacy.
- Improves ventilation efficacy.
- Simplifies the titration process.

## Advanced leak-sensing technology with Digital Auto-Trak

- Our clinically-proven Digital Auto-Trak sensitivity algorithm:
  - Enables you to achieve optimum patient/ventilator synchrony.
  - Recognizes and compensates for leaks.
  - Automatically adjusts its variable trigger and cycle thresholds.

## Easy access to patient data

- Monitor patient compliance. Evaluate ventilation efficiency. Identify trends.
- Tap into EncorePro and EncoreAnywhere ventilation data management software.
- Access BiPAP AVAPS and BiPAP S/T ventilator data such as AHI, leak, clear airway apneas, and minute ventilation.
- Connect to your patients via wired and wireless modems plus an SD memory card.



<sup>2</sup>Storre, JH, et al. Average Volume-Assured Pressure Support in Obesity Hypoventilation: A Randomized Crossover Trial. *Chest* 2006;130;815-821.

# Which patients benefit from AVAPS?

Any of your patients who develop chronic hypoventilation may find the BiPAP AVAPS a more comfortable and effective NIV therapy. For example, neuromuscular, COPD, and obesity hypoventilation patients are strong candidates for BiPAP AVAPS.



“The addition of AVAPS to BPV-S/T provides beneficial physiologic improvements, resulting in a more efficient decrease of  $P_{tCO_2}$  compared to BPV-S/T therapy<sup>2</sup> alone.”

## One unbeatable package

Improved patient care, automatic adjustments to meet changing patient needs, plus simplified patient management. And it all comes together in a new lighter, quieter, and easy-to-use device that you and your patients are sure to appreciate. Integrated alarms help maintain patient safety. System One humidity control analyzes ambient temperature, relative humidity, and patient flow to deliver optimum humidity – and ultimate comfort – to the patient while also dramatically reducing rainout.



# AVAPS suggested settings



Mode	S/T
AVAPS	on
Tidal Volume	500
IPAP Max	12.0

1. Set the target tidal volume to 8 ml/kg of ideal weight.

AVAPS	S/T
Tidal Volume	500
IPAP Max	25.0
IPAP Min	18.0

2. Set IPAP limits  
Max: 25 cm<sub>2</sub>H<sub>2</sub>O depending on patient pathology  
Min: EPAP + 4 cm<sub>2</sub>H<sub>2</sub>O

IPAP Min	18.0
EPAP	4.0
BPM	15
Ti	1.0

3. Set respiratory rate 2-3 BPM below resting respiratory rate.

BPM	15
Ti	1.5
Rise Tim...	on
Rise Time	1

4. Set inspiratory time.

Rise Time	2.0
Rise Tim...	on
Rise Time	1
Ramp Time	off

5. Adjust rise time for patient comfort.

Height	Ideal weight	Vte if 8ml/kg
59"	52.0 kg	420 ml
61"	55.5 kg	440 ml
63"	59.0 kg	470 ml
65"	62.5 kg	500 ml
67"	66.5 kg	530 ml
69"	70.5 kg	560 ml
71"	74.5 kg	600 ml
73"	78.5 kg	630 ml
75"	83.0 kg	660 ml

Product specifications			
<b>Physical</b>			
Size	18 cm x 14 cm x 10 cm (7" L x 5.5" W x 4" H)		
Weight	Approximately 1.36 kg (3 lbs.)		
<b>Therapy parameters</b>			
Modes	CPAP, S, ST, PC, T		
Bi-Flex	Available on S mode		
Timed inspiration	0.5 to 3.0 seconds		
IPAP	4 to 25 cm <sub>2</sub> H		
EPAP	4 to 25 cm <sub>2</sub> H		
CPAP	4 to 20 cm <sub>2</sub> H		
Ramp	0 to 45 minutes		
Breath rate	0 to 30 BPM		
<b>AVAPS (only available on BiPAP AVAPS device)</b>			
Mode availability	AVAPS available on S, ST, PC, and T modes		
Target tidal volume	200 to 1500 ml		
IPAPmin	From EPAP to IPAPmax		
IPAPmax	From IPAPmin to 25 cm <sub>2</sub> H		
Patient alarms available	Patient disconnect, apnea, low minute ventilation, low tidal volume (AVAPS modes only)		
<b>Environmental</b>		<b>Operating</b>	<b>Storage</b>
Temperature	5° C to 35° C (41° F to 95° F)		-20° C to 60° C (-4° F to 140° F)
Relative humidity	15 to 95% (non-condensing)		15 to 95% (non-condensing)
Atmospheric pressure	101 kPa to 77 kPa (0-2286 m / 0-7500 ft)		N/A
Sound level	< 30 dBA at 10 cm pressure		
<b>Electrical</b>			
AC voltage source	100 to 240 VAC, 50/60 Hz, 2.1 A		
DC power	12 VDC, 5.0 A		
Displayed parameters	Patient pressure, leak, tidal volume, and respiratory rate		
Filters	Foam and optional ultra-fine		
<b>Ordering information</b>			
<b>Item</b>	<b>US</b>	<b>Canada</b>	
BiPAP AVAPS, C series	1060485	CA1060486	
BiPAP AVAPS, C series, core package	1061418	CA1061419	
BiPAP S/T, C series	1061420	CA1061421	
BiPAP S/T, C series, core package	1061422	CA1061423	
<b>Ventilator accessories</b>	<b>Part number</b>	<b>Ventilator accessories</b>	<b>Part number</b>
Foam filter kit	1063091	Water chamber	1063785
Ultra-fine filter kit	1063096	Power supply	1063786
System One heated humidifier	1056209	Carrying case	1063857
Device side panel	1063784	Power cord US/Canada	1005894

AVAPS and Bi-Flex features are not cleared for pediatric use.

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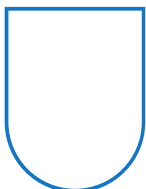
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