DreamStation BiPAP S/T and BiPAP AVAPS Home ventilation solutions

Sleep and Respiratory Care

innovation you

Advanced, automated and customizable therapy* that adapts to changing therapeutic demands.

Patients suffering from chronic respiratory disease have changing therapeutic demands and their treatment must adapt at every step along the way.

Philips home ventilation solutions, DreamStation BiPAP S/T and AVAPS, automatically adapt to unique patient needs, delivering safe and effective ventilation.

* Auto-Trak, AVAPS, AAM, AVAPS-AE

DreamStation BiPAP S/T and AVAPS.

The DreamStation BiPAP S/T and AVAPS are intended to provide non-invasive ventilatory support to Obstructive Sleep Apnea (OSA) and Respiratory Impairment patients weighing over 18 kg.

The devices may be used in the hospital or home.

Dynamic adaptable ventilation technologies.*

1

Patient comfort

Designed to maintain effective therapy to enhance patient comfort by adapting to their changing conditions.[1]

2

Patient safety

Clinically proven therapy algorithms* that support your patients and provide safe and effective NIV therapy.[2,3]

3

Remote patient management

Connectivity to Care Orchestrator+, providing insights needed to help make informed decisions.[4]

4

Versatility

Designed to meet a variety of respiratory needs, from critical to chronic, across the hospital and home.[3,5-8]

*Auto-Trak, AVAPS, AVAPS-AE, AAM
+ Integrated Bluetooth connectivity with option to add cellular service or Wi-Fi.

1 Limsuwat et al., (2019) Southwest Respir Crit Care Chronicles,7(30):19–28
2 Murphy et al., (2015) European Respiratory Journal, 46 (2) 548-551
3 Magdy et al., (2020) Respiratory Research, 21(1):64.
4 Mansell et al., (2018) BMJ open respiratory research vol. 5,1 e000238.
5 Murphy et al., (2022) Thorax, 78(1), 24–31
6 Saddi et al., (2021) J Clin Sleep Medicine, May 1;17(5):925-930
7 Maheshwari et al., (2022) The European Respiratory Journal, 14(12):e32200
8 Briones-Claudett et al. (2013) Hindawi, volume 2022, Article ID 4333345

Automated technologies* that provide customized ventilation.

- Advanced, automated and customizable therapy that adapts to changing therapeutic demands.
- Designed to maintain effective therapy to enhance patient comfort by adapting to their changing conditions.[1]
- Remote connectivity, therapy data transmission and prescription changes to help improve patient care and compliance.[2]
- DreamStation BiPAP S/T and AVAPS devices have met all applicable industry testing standards, incl. VOC emissions testing to assure your patient safety.

*Auto-Trak, AVAPS, AVAPS-AE

1 Limsuwat et al., (2019) Southwest Respir Crit Care Chronicles,7(30):19–28
2 Mansell et al., (2018) BMJ Open Respir Res., 3;5(1):e000238.

Simplify the complexity of managing ventilated patients with our automated technologies:*[1,2]

DreamStation BiPAP S/T and BiPAP AVAPS algorithms simultaneously and dynamically treat COPD patients with OSA overlap.[3-5]

Provide appropriate therapeutic support to meet the changing needs of patients over time.[3]

* AVAPS, AVAPS-AE, and Auto-Trak.

1 Murphy et al., (2022) Thorax, 78(1), 24–31
2 Patout et al., (2020) Respirology, 25(10), 1073–1081
3 Murphy et al., (2013) European Respiratory Journal 42. Suppl 57 : P2583
4 Murphy et al., (2015) European Respiratory Journal, 46 (2) 548-551
5 Magdy et al., (2020) Respiratory Research, 21(1):64

Auto-Trak

AVAPS

AVAPS-AE: Fully automated ventilation

Automated airway management

Auto-Trak

- Automatically helps to maintain optimal breath synchronization even in the presence of unintentional leaks.[1]
- Designed to detect the onset of inspiration and expiration, important factors in synchronizing the delivery of NIV therapy.
- Designed to automatically respond breath by breath to patient changing conditions.

1 Yarascavitch J, (2022) Bench study: Philips Respironics Trilogy EV300 and V60/V60 Plus for noninvasive ventilation.

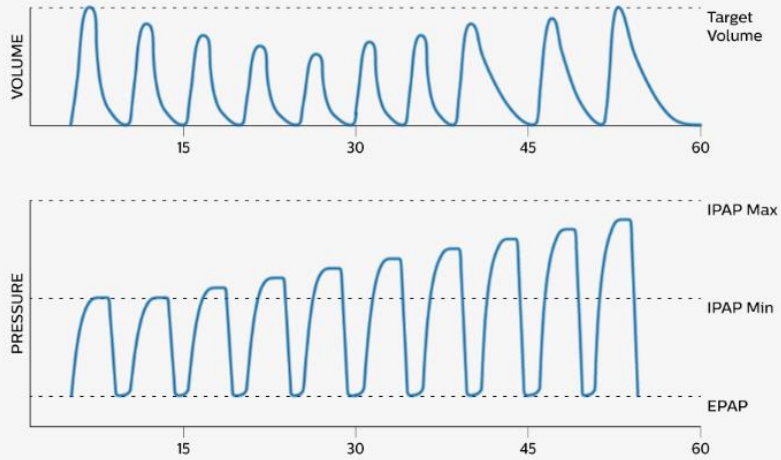
Auto-Trak

- Helps to improve patient-ventilator synchrony.[1]
- Helps to reduce the time clinicians spend adjusting parameters and addressing unintentional leaks.
- Decreases the need for frequent manual triggering and cycling adjustments, allowing you to focus on other aspects of patient care.

1 Yarascavitch J, (2022) Bench study: Philips Respironics Trilogy EV300 and V60/V60 Plus for noninvasive ventilation.

AVAPS*

- Feature that can be added to pressure modes (S, S/T, PC).
- Designed to be comprehensive, AVAPS* can be used non-invasively and invasively for adult and most pediatric patients.**
- Helps to support patient comfort by providing the lowest pressure while ensuring a consistent tidal volume.[1,2]
- Provides effective therapy equivalent to a protocolized titration.[3-5]



Graph 1.1 - Average Volume Assured Pressure Support (AVAPS) helps patients maintain a tidal volume (VT) equal to or greater than the target tidal volume by automatically controlling the gradual change in pressure support (PS) provided to the patient. For demonstration purposes only.

* Available in BiPAP AVAPS only
** AVAPS is indicated for > 10 kg; please refer to the patient's particular device instructions for use for further indications.
1 Cammarota et al., (2022) Front Med, 9:874250
2 Limsuwat et al., (2019) Southwest Respir Crit Care Chronicles, 7(30):19–28
3 Storre et al., (2006) Chest, 130; 815-821
4 Janssens et al., (2009) Respir Med, 103(2): 165-172
5 Murphy et al., (2012) Thorax, 67(8), 727–734

AVAPS*

- AVAPS* is designed to automatically adjust pressures to achieve the target tidal volume, minimizing the need for frequent manual bedside adjustments.[1-3]
- Provides consistent and reliable ventilation throughout changes in patient respiratory mechanics (compliance and resistance).
- In COPD patients, daily use of AVAPS* has been shown to reduce $PaCO_2$ while improving exercise tolerance and quality of life.[4]

*Available in BiPAP AVAPS only.

1 Storre et al., (2006) Chest, 130; 815-821
2 Janssens et al., (2009) Respir Med, 103(2): 165-172
3 Murphy et al., (2012) Thorax, 67(8), 727–734
4 Magdy et al., (2020) Respiratory Research, 21(1):64.

CO_2 reduction

Health-related quality of life

Exercise tolerance

AVAPS-AE*

- An auto-titration mode of NIV with multiple algorithms that work simultaneously to meet the changing needs of your patients:
  - AVAPS, to adjust pressure to a target tidal volume.
  - Auto EPAP, to proactively adjust to the lowest effective pressure for maintaining a patent airway.
  - Auto Backup rate, designed to provide enough time to fully exhale between breaths to prevent air trapping and support synchronization.

* Available in BiPAP AVAPS only and in selected markets only.

AVAPS-AE*

- Designed to address common ventilation concerns, such as gas exchange, airway patency and asynchrony.[1]
- Has been shown to help improve gas exchange better than BiPAP S/T mode in COPD patients with OHS.**,[2]
- Can help to improve efficiency and shorten the time it takes to setup your NIV patients.[3]
- As part of a multifaceted intervention program, has shown to reduce hospital readmissions.***,[4]

*Available in BiPAP AVAPS only and in selected markets only.
**In a study of 66 COPD patients with OHS .
***Study done with COPD patients
1 Ramsay et al., (2015) Thorax, 70(10), 946–952
2 Han et al., (2019) European Respiratory Journal, 54(Suppl. 63) OA4926.
3 Patout et al., (2020) Respirology, 25(10), 1073–1081
4 Coughlin et al., (2017) Value Health, 20(3), 379–387

Automated airway management (AAM)*

- Customizable EPAP therapy that can be applied to Philips' S, S/T, T, and PC noninvasive pressure modes.*
- Provides the minimum EPAP/PEEP to maintain a patent upper airway.*[1]
- Results from a 4-week clinical study found that 58% of participants found AAM more comfortable than fixed EPAP in their bi-level Device.*+[1]
- AAM provides therapy that is as effective as fixed BiPAP pressure therapy in managing AHI and sleep adherence.*[1]

* AAM is available in selected markets only
+ DS AVAPS, n=14;
1 Hardy et al., (2017) European Respiratory Journal, 50 (Suppl.61) PA2188

Keep the care team connected and aligned.

- Performance Check, enabling easy remote troubleshooting.
- DreamStation connected to Care Orchestrator*, providing insights needed to help make informed decisions.[1]
- Daily patient feedback to keep patients aware of progress and engaged in their therapy.
- Connected to the DreamMapper patient application that helps patients take an active role in their therapy management.

*Integrated Bluetooth connectivity with option to add cellular service or Wi-Fi.
1 Mansell, et al., (2018) BMJ Open Respir Res. 3;5(1):e000238.

Philips home ventilation solutions: DreamStation BiPAP S/T and AVAPS.

Takeaways:

1

Patient/Device synchronization

Auto-Trak auto-adaptive triggering and cycling technology in combination with leak compensation may help reduce the time clinicians spend adjusting parameters and addressing unintentional leaks.

2

Patient comfort

AVAPS* helps to support patient comfort by providing the lowest pressure while ensuring a consistent tidal volume.[1,2]

3

Automatic adaption to patient respiratory system

AVAPS* provides consistent and reliable ventilation throughout changes in patient respiratory mechanics (compliance and resistance).

4

Remote patient management

DreamStation provides remote connectivity, therapy data transmission and prescription changes to help improve patient care and compliance. [3]

* Available in BiPAP AVAPS only

1 Cammarota et al., (2022) Front Med, 9:874250
2 Limsuwat et al., (2019) Southwest Respir Crit Care Chronicles, 7(30):19–28
3 Mansell, et al., (2018) BMJ Open Respir Res. 3;5(1):e000238.

Philips offers solutions that adapt to the complex and changing therapeutic demands of your patients.

Let us show you how the power of the DreamStation platform can help you adapt to the changing demands of healthcare.


PHILIPS