

# CPAP Solutions

## Product Profile

---

Overview: The Family of **SleepStyle™** CPAP Solutions



**SleepStyle™**  
SLEEP PERFORMANCE FOR  
AN ENERGIZED LIFESTYLE

**Fisher & Paykel**  
HEALTHCARE

**Contents**

- 03 Sleep Performance for an Energized Lifestyle
- 04 Fisher & Paykel Healthcare - Leading through Unique Performance Features
- 06 Introducing the SleepStyle™ 230 Series - with Ambient Tracking™ Plus
- 07 Introducing the SleepStyle™ 240 Series - with SmartStick™ Technology
- 08 Introducing the SleepStyle™ 254 AutoCPAP - with SensAwake™ Technology
- 09 Introducing the SleepStyle™ 600 Series - with ThermoSmart™ Technology
- 10 The Range of SleepStyle™ CPAP Solutions for Your Business



Our quality of life blossoms when we are well. Sleep, though seemingly unimportant, is essential for human beings to live life in an optimal state of health. Sleep is actually highly productive. Our optimal performance while asleep is vital to ensure recovery and rejuvenation. Sleep replenishes and energizes, giving us the freedom to enjoy our lifestyle.

## Sleep Performance for an Energized Lifestyle

At Fisher & Paykel Healthcare, we believe everyone should enjoy a good night's sleep. We've based our business on this belief. To those who suffer from Obstructive Sleep Apnea (OSA) and those who provide treatment for them, we bring **SleepStyle™** – an innovative family of Continuous Positive Airway Pressure (CPAP) and interface solutions.

Our business, like yours, is all about results:

- **Commercial results** – maximized through product research, design and manufacture.
- **Clinical results** – improved through leading-edge technologies.
- **Patient-care results** – achieved through easy, versatile and comfortable solutions.

These are the results of our dedication to helping you provide 24-hour wellness for your patients. Our **SleepStyle™** CPAP technologies deliver the best in sleep performance for an energized lifestyle.



# Fisher & Paykel Healthcare – Leading through Unique Performance Features

*These unique performance features appear in our range of SleepStyle™ CPAP units.*

*Refer to our handy tables on the following pages for guidance on which unit contains each feature.*





Fisher & Paykel Healthcare is a leading designer and manufacturer of an impressive range of healthcare devices. Each CPAP device in the SleepStyle™ family has multiple performance features that contribute to our reputation as an innovator in the delivery of CPAP therapy. To simplify CPAP device choice, we have grouped these performance features by technology.

## HUMIDIFICATION DELIVERY

Fisher & Paykel Healthcare first entered the respiratory care market in 1971 with the development of a unique respiratory humidifier system for use in critical care. Since this time, Fisher & Paykel Healthcare has adapted humidification for other applications including CPAP therapy. Heated humidification has been repeatedly proven to:

- Prevent drying of the nasal airways and reduce nasal airway resistance and congestion.
- Give patients more comfortable treatment, which can lead to improved CPAP compliance.

The SleepStyle™ family of CPAP devices offer a range of humidification performance features that enhance therapy, such as: delivery via a fully integrated system, an auto-adjusting humidification technology and a unique heated breathing-tube technology.

HUMIDIFICATION DELIVERY			
			
<p><b>Convertible System</b> Upgradable from standard to humidified CPAP (and vice versa i.e. revertible)</p>	<p><b>Fully Integrated System</b> A CPAP and humidifier incorporated into one unit</p>	<p><b>Ambient Tracking™ Plus Technology</b> Auto-adjusting humidification technology</p>	<p><b>ThermoSmart™ Technology</b> Unique heated breathing-tube technology</p>
<p>A standard unit can be easily converted, using simple conversion kits, to a fully integrated humidified unit for cold or heated humidification.</p> <p><b>Benefits:</b></p> <p>Versatile to meet a patient's changing therapy needs.</p>	<p>A compact and practical CPAP solution. Using humidification from the outset of treatment is proven to increase therapy acceptance and compliance.</p> <p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Quick and easy set-up.</li> <li>• Compact and robust for travel convenience.</li> <li>• Hassle-free cleaning and maintenance.</li> </ul>	<p>This auto-adjusting heater plate maximizes humidity delivered by compensating for changes in room temperature and during mouth and mask leak. The level of humidity delivered is dependent on room temperature.</p> <p><b>Benefits:</b></p> <p>Increased patient comfort and therapy effectiveness through:</p> <ul style="list-style-type: none"> <li>• Minimized condensation and gurgling in the tube.</li> <li>• Increased mask pressure stability.</li> <li>• Maximized humidity to alleviate upper airway congestion.</li> </ul> <p><b>Ambient Tracking™ Plus</b></p>	<p>This unique heated breathing-tube delivers controlled (higher and customized) levels of humidity to the patient. The levels of humidity delivered are independent of room temperature.</p> <p><b>Benefits:</b></p> <p>Optimal patient comfort and therapy effectiveness through:</p> <ul style="list-style-type: none"> <li>• Prevention of condensation* and gurgling noise.</li> <li>• Increased mask pressure stability.</li> <li>• Higher humidity to alleviate upper airway congestion.</li> </ul> <p><b>ThermoSmart™</b></p>

\* Subject to the operating conditions specified in the applicable Operating Manual.

## PRESSURE RELIEF

Patients commonly arouse from sleep and experience awake states, during which they are intolerant of the delivered pressure and can have difficulty returning to sleep. SensAwake™ monitors patients' breathing patterns to detect breathing irregularity which is associated with wakefulness. During these critical awake states, SensAwake™ promptly reduces the pressure to facilitate the transition back to sleep.



### SensAwake™ Technology Pressure relief technology

This unique pressure relief technology senses the critical awake state of patients and promptly reduces the pressure to facilitate the transition back to sleep.

#### Benefits:

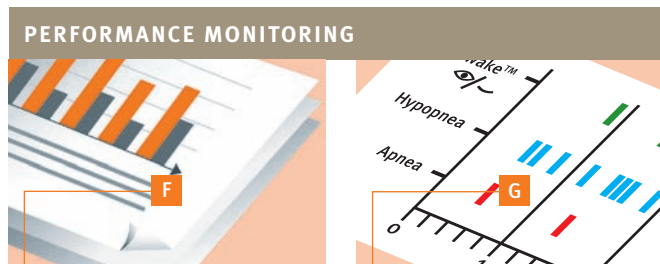
SensAwake™ works in conjunction with the auto-adjusting technology to provide personalized comfort for the patient during sleep and awake states.

Patient comfort is critical for therapy compliance and effectiveness.

SensAwake™

## PERFORMANCE MONITORING

In response to a need for physicians and therapy providers to monitor the overall performance of OSA therapy – specifically, clinical effectiveness – Fisher & Paykel Healthcare offers performance tracking and logging technologies. These reporting tools provide for a visible record of treatment effectiveness.



### ComplianceMaximizer™ Software Usage recording software

This software is a compliance monitoring technology that records and reports on machine usage. All SleepStyle™ 230 and 600 Series CPAP's are compatible with this software.

#### Benefits:

Customizable reporting formats and content are available for better therapy monitoring.

### PerformanceMaximizer™ Software Performance monitoring software

This software records and reports on compliance and efficacy data, including AHI and Leak. All SleepStyle™ 240 and 254 Series CPAP's are compatible with this software.

#### Benefits:

Comprehensive patient monitoring is available with:

- A selectable date range for customizable reports.
- 30 days of summary data.
- 7 nights of detailed data.

## REMOVABLE MEDIA

The ability to efficiently monitor patient performance on a frequent basis is crucial to commercial success. The healthcare provider can remotely view and update patient settings using the SmartStick™ and PerformanceMaximizer™ Software. Two-way communication between the SmartStick™ and the device, means that any changes made to the settings will be automatically updated when the SmartStick™ is next inserted into the device.



### SmartStick™ Technology Removable media

The SmartStick™ utilizes generic USB technology to transfer information from the device to the PC. This removable media works in conjunction with PerformanceMaximizer™ Software for all SleepStyle™ 240 and 254 Series CPAP's.

#### Benefits:

The SmartStick™ provides convenient access to patient data through two-way communication between the device and the software prescription settings.

## Additional Performance Features:

### Altitude Adjustment Control **I**

Available with manual or automatic controls, the device will adjust to compensate for pressure variations caused by changing altitudes.

### Leak Compensation Technology **J**

The device automatically detects and compensates for mouth or mask leaks to ensure the patient is effectively treated throughout the night.

### TitrationMaximizer™ Software **K**

PC titration software that allows sleep technicians to titrate remotely via a PC in their labs.

### DC/AC Converter Compatibility

Designed for use with a DC/AC converter when mains power supply is unavailable. Contact your Fisher & Paykel Healthcare representative for recommended inverter specifications.

### Ramp

Short-term pressure relief to allow initiation of sleep. Following activation, pressure builds up over 20 minutes to a predetermined therapeutic level.

### Automatic Voltage Detection

Compatible with any domestic power supply. Convenient for overseas travel.

### One-piece Chamber

A single-component humidification chamber; no complicated assembly or disassembly required.

### Optional Two-piece Chamber

A separable chamber is available in some areas; dishwasher safe with a removable base.

Ambient Tracking™ Plus

# Introducing the SleepStyle™ 200 Series



The SleepStyle™ 230 Series offers a comprehensive range of standard, enhanced and truly integrated CPAP devices with usage recording capability.

The table below shows the range of performance features available in the SleepStyle™ 230 Series:

SleepStyle™ 230 Series			Units					
Performance Category	Performance Feature		231*	232	233*	234	236	238
Humidification Delivery	A	Convertible/Reversible System						
		Cold Passover						
	B	Fully Integrated System	●	●	●	●	●	●
	C	Ambient Tracking™ Plus Technology			○	○		○
Performance Monitoring	F	ComplianceMaximizer™ Software		●		●	●	●
Pressure Control	I	Altitude Adjustment Control	●	●	●	●		
		Manual					●	●
	J	Leak Compensation					●	●
	K	TitrationMaximizer™ Software	●	●	●	●	●	●

\* Models not available in all countries.

KEY	
	Convertible System (i.e. reversible)

## AMBIENT TRACKING™ PLUS

The strongest differentiator in the SleepStyle™ 200 Series is in the area of humidification delivery with the addition of **Ambient Tracking™ Plus**.

A common side effect of conventional humidifiers is the accumulation of water (condensation) in the breathing tube, resulting in disruptive gurgling noises and tube vibrations. Research has shown as little as 10 ml of condensate causes a 5.6 cmH<sub>2</sub>O inspiratory pressure drop at the mask.



The SleepStyle™ 240 Series offers a range of truly integrated CPAP devices with Performance Monitoring capability and Removable Media.

The table below shows the range of performance features available in the SleepStyle™ 240 Series:

**THE SMARTSTICK™**

Utilizing USB technology, the SmartStick™ provides convenient removable media for access to view and update settings. Combined with PerformanceMaximizer™ Software, therapy analysis is streamlined, with options for compliance or full efficacy data including AHI and leak.

Generic USB technology means that no additional card readers or equipment are necessary. The SmartStick™ will work in the USB port of any computer.

SleepStyle™ 240 Series			Units	
Performance Category	Performance Feature		242*	244
Humidification Delivery	B	Fully Integrated System	●	●
	C	Ambient Tracking™ Plus Technology	●	●
Performance Monitoring	G	PerformanceMaximizer™ Software	●	●
		Compliance Data Efficacy Data		●
Removable Media	H	SmartStick™ Technology	●	●
Pressure Control	I	Altitude Adjustment Control	●	●
		Manual Automatic		
	K	TitrationMaximizer™ Software	●	●

\* Model not available in all countries.

**Ambient Tracking™ Plus** balances humidity to provide the most effective CPAP therapy under changing conditions:

- Auto-adjusts humidity to compensate for changes in room temperature – minimizes condensation.

- Auto-adjusts humidity to compensate for humidity loss during leaks (leaks occur up to 20% of sleep time) – maximizes humidity.

**Ambient Tracking™ Plus** succeeds in promoting greater results for healthcare providers, physicians, sleep technicians and patients alike.



# Introducing the SleepStyle™ 200 Auto Series



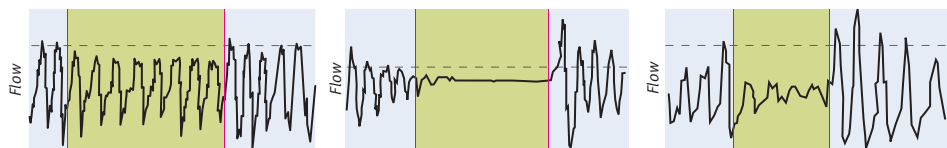
The SleepStyle™ 254 AutoCPAP delivers outstanding clinical, patient-care and commercial results due to its innovative SensAwake™ Technology and its unique ability to personalize sleep comfort to the needs of the patient.

The table below shows the range of performance features available in the SleepStyle™ 254 AutoCPAP:

SleepStyle™ 254 AutoCPAP			Unit
<b>Performance Category</b>	<b>Performance Feature</b>		254
Humidification Delivery	<b>B</b> Fully Integrated System		●
	<b>C</b> Ambient Tracking™ Plus Technology		●
Pressure Relief	<b>E</b> SensAwake™ Technology		●
Performance Monitoring	<b>G</b> PerformanceMaximizer™ Software	Compliance Data	●
		Efficacy Data	●
Removable Media	<b>H</b> SmartStick™ Technology		●
Pressure Control	<b>I</b> Altitude Adjustment Control	Manual Automatic	●
	<b>J</b> Leak Compensation		●
	<b>K</b> TitrationMaximizer™ Software		●

### AUTO-ADJUSTING PRESSURE

The versatile AutoCPAP device can be used as a titration and long-term treatment solution for your patients. The flow-based auto-adjusting algorithm detects and effectively responds to flow limitations, apneas and hypopneas.



**Flow Limitations:**  
Pressure increases in response to flow limitations up to the maximum set pressure.

**Apneas:**  
Pressure increases in response to apneas, up to a predetermined level, programmable by the physician.

**Hypopneas:**  
Pressure increases in response to both central and obstructive hypopneas up to the same predetermined level programmed for apneas. Above this level the algorithm will continue to respond to obstructive hypopneas.

**SensAwake™ Technology:**  
**The Problem:** During awake states patients can be intolerant of the delivered pressure and patient comfort is critical to return to sleep.  
**The Solution:** SensAwake™ senses the critical awake state of patients and provides pressure relief by promptly reducing the pressure to the minimum setting. SensAwake™ aids the transition back to sleep for improved patient comfort.



# Introducing the SleepStyle™ 600 Series



The **SleepStyle™ 600 Series** takes heated humidification one step further, with the integration of **ThermoSmart™ Technology**. This unique technology delivers optimal therapy success.

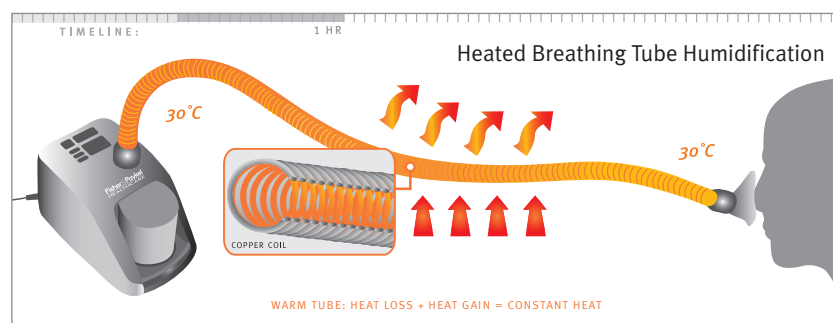
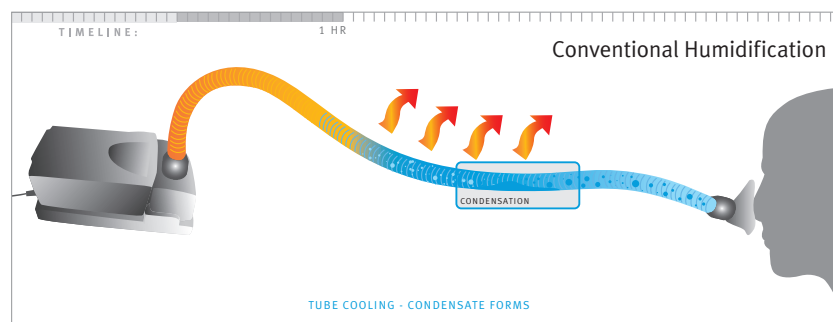
The table below shows the range of performance features available in the SleepStyle™ 600 CPAP Series:

**ThermoSmart™ Technology** represents the most advanced form of humidified CPAP treatment by incorporating a heated breathing tube.

**ThermoSmart™** is available with the **SleepStyle™ 600 Series** – the first CPAP in the world to constantly deliver controlled humidity (higher and customized), independent of changes in room temperature. By working to prevent condensation\*, the **SleepStyle™ 600 Series** clears the way for improved commercial results from enhanced patient care and clinical effectiveness.

\* Subject to the operating conditions specified in the applicable Operating Manual.

SleepStyle™ 600 Series		Units	
Performance Category	Performance Feature	604	608
Humidification Delivery	<b>B</b> Fully Integrated System	●	●
	<b>D</b> ThermoSmart™ Technology	●	●
Performance Monitoring	<b>F</b> ComplianceMaximizer™ Software	●	●
Pressure Control	<b>I</b> Altitude Adjustment Control	●	●
	<b>J</b> Leak Compensation		●
	<b>K</b> TitrationMaximizer™ Software	●	●



Above: **ThermoSmart™ Technology**, with its heated breathing tube, maintains the heat and moisture all the way to the patient, allowing the delivery of higher optimal humidity levels and preventing condensation\*.

\*Subject to the operating conditions specified in the applicable Operating Manual.



# The Range of SleepStyle™ Solutions

Choosing the right SleepStyle™ unit will be influenced by your patient needs and your business goals.

Healthcare providers require commercial results when caring for their patients. Our product range delivers many cost-effective advantages, including time-saving features, reduced inventory, versatile systems and competitive pricing. Our aim is to provide you with greater efficiency and less cost while focusing on patient outcomes and therapy success.

The SleepStyle™ Series combines the best in commercial and therapy requirements to suit each business model and patient need.

The table below provides a summary for all the features available in each of the SleepStyle™ units. The selection criteria may also help when deciding which models will best suit each patient.

SleepStyle™ Series Performance Features			
Performance Category	Performance Feature		
Humidification Delivery	<b>A</b>	Convertible/Reversible System	Cold Passover Heated Humidification
	<b>B</b>	Fully Integrated System	
	<b>C</b>	Ambient Tracking™ Plus Technology	
	<b>D</b>	ThermoSmart™ Technology	
Pressure Relief	<b>E</b>	SensAwake™ Technology	
Performance Monitoring	<b>F</b>	ComplianceMaximizer™ Software	
	<b>G</b>	PerformanceMaximizer™ Software	Compliance Data Efficacy Data
Removable Media	<b>H</b>	SmartStick™ Technology	
Pressure Control	<b>I</b>	Altitude Adjustment Control	Manual Automatic
	<b>J</b>	Leak Compensation	
	<b>K</b>	TitrationMaximizer™ Software	

<b>KEY</b>
<b>Convertible System (i.e. reversible)</b>

**SELECTION CRITERIA**

**SLEEPSTYLE™ 230 SERIES WITH AMBIENT TRACKING™ PLUS**

For cost effective and reliable CPAP therapy. Ambient Tracking™ Plus works to maximize humidity and minimize condensation. When used in conjunction with ComplianceMaximizer™ software, patient usage data can also be measured.

**SLEEPSTYLE™ 240 SERIES WITH SMARTSTICK™ TECHNOLOGY**

To assist with your business needs to monitor the overall performance of OSA therapy for each patient. The SmartStick™ provides convenient access to remotely view detailed efficacy data and update patient settings with two-way communication between the SmartStick™ and the device.

**SLEEPSTYLE™ 254 AUTOCPAP WITH SENSAAWAKE™ TECHNOLOGY**

To assist patients experiencing:

- Pressure intolerance
- Pressure requirements >10 cmH2O
- REM or positional OSA
- Incomplete laboratory titration
- Planned weight changes (eg, future bariatric surgery)
- Breakthrough symptoms after long-term CPAP use.

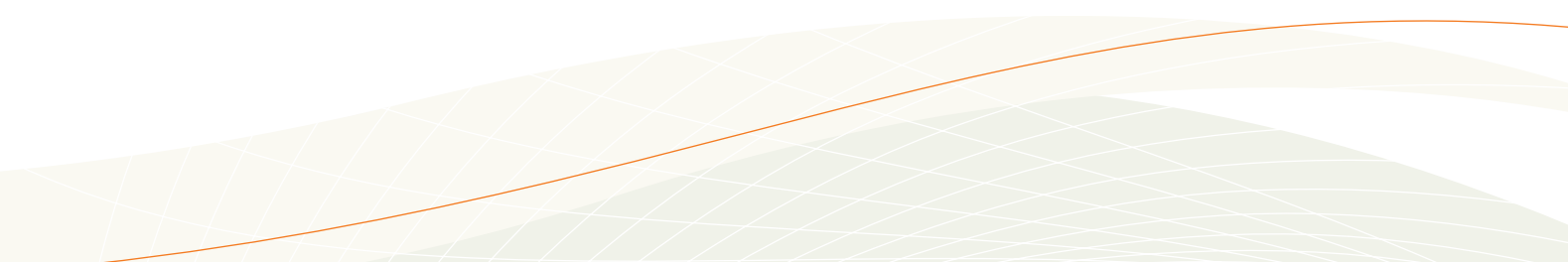
**SLEEPSTYLE™ 600 SERIES WITH THERMOSMART™ TECHNOLOGY**

To assist all patients, but particularly those with physical characteristics compromising their normal nasal function, such as:

- Patients over 60
- Patients on medication
- Patients with pre-existing nasal conditions
- Patients who prefer a cool room.

	Units										
	230 Series						240 Series		250 Series	600 Series	
	231*	232	233*	234	236	238	242*	244	254	604	608
	●	●			●						
			●	●		●	●	●		●	●
			●	●		●	●	●			
								●			
		●		●	●	●				●	●
							●	●	●		
							●	●	●		
	●	●	●	●			●	●	●	●	
					●	●					●
					●	●			●		●
	●	●	●	●	●	●	●	●	●	●	●

\* Models not available in all countries.



# For more information, please contact your local Fisher & Paykel Healthcare representative

Fisher & Paykel Healthcare has a policy of continuous product improvement and reserves the right to alter specifications without notice. Patented in principal countries of the world.

## **Manufacturer**

Fisher & Paykel Healthcare Ltd  
15 Maurice Paykel Place  
East Tamaki, Auckland 2013  
PO Box 14 348, Panmure  
Auckland 1741, New Zealand

Tel: +64 9 574 0100  
Fax: +64 9 574 0158  
Email: [info@fphcare.com](mailto:info@fphcare.com)  
Web: [www.fphcare.com](http://www.fphcare.com)

## **Australia**

Tel: +61 3 9879 5022  
Fax: +61 3 9879 5232

## **Austria**

Tel: 0800 29 31 23  
Fax: 0800 29 31 22

## **Benelux**

Tel: +31 40 216 3555  
Fax: +31 40 216 3554

## **China**

Tel: +86 20 3205 3486  
Fax: +86 20 3205 2132

## **France**

Tel: +33 1 6446 5201  
Fax: +33 1 6446 5221

## **Germany**

Tel: +49 7182 93777 0  
Fax: +49 7182 93777 99

## **India**

Tel: +91 80 4123 6041  
Fax: +91 80 4123 6044

## **Irish Republic**

Tel: 1800 409 011

## **Italy**

Tel: +39 06 7839 2939  
Fax: +39 06 7814 7709

## **Japan**

Tel: +81 3 3661 7205  
Fax: +81 3 3661 7206

## **Northern Ireland**

Tel: 0800 132 189

## **Spain**

Tel: +34 902 013 346  
Fax: +34 902 013 379

## **Sweden**

Tel: +46 8 564 76 680  
Fax: +46 8 36 63 10

## **Switzerland**

Tel: 0800 83 47 63  
Fax: 0800 83 47 54

## **UK**

(EU Authorised Representative)  
Fisher & Paykel Healthcare UK Ltd  
Unit 16, Cordwallis Park  
Clivemont Road, Maidenhead  
Berkshire SL6 7BU, UK  
Tel: +44 1628 626 136  
Fax: +44 1628 626 146

## **USA**

Tel: 1800 446 3908  
or +1 949 453 4000  
Fax: +1 949 453 4001