



Enhanced AutoSet™ in the S9™ Series

ResMed's clinically proven and time-tested AutoSet™ algorithm remains the gold standard for automatic positive airway pressure (APAP) therapy, having treated millions of patients effectively and comfortably for over a decade worldwide.¹⁻³

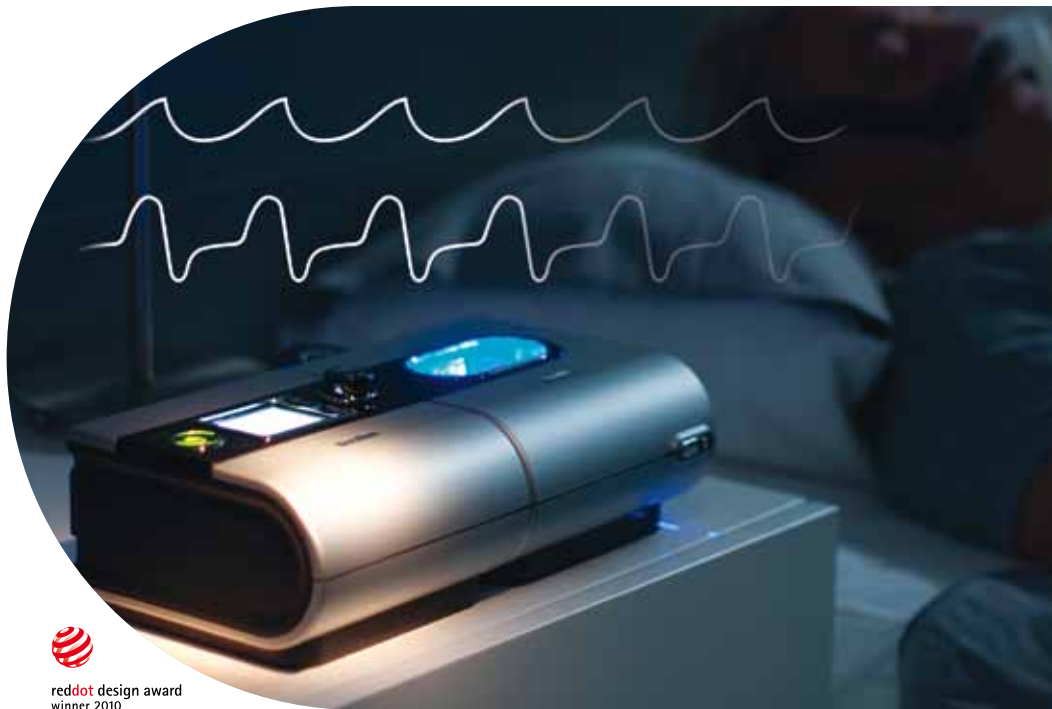
With the introduction of the S9™ Series, we've evolved our algorithm to detect central sleep apnea (CSA) events and differentiate them from obstructive events, for an even more robust combination of clinical features and comfort technology.

Why prescribe AutoSet?

A patient's pressure needs can vary based on sleep position, alcohol consumption, seasonal allergies, weight gain or loss, and numerous other lifestyle changes. Sometimes they'll need higher pressures to prevent apneas, and sometimes lower. The most comfortable approach is to adjust pressure delivery so that they're always receiving the lowest pressure required to keep their airway open. ResMed's AutoSet does exactly that. With an intelligent algorithm, AutoSet continually monitors a patient's breathing, adjusting pressure breath by breath to ensure they are always receiving the lowest therapeutic pressure. In doing so, AutoSet is clinically proven to increase patient comfort and compliance.¹⁻³

How does AutoSet technology work?

Using a multiple-breath moving average, the AutoSet algorithm continually monitors breathing and responds immediately to any airway changes, such as flow limitation, snoring and apneas.



AutoSet treats and prevents apneic events

Because AutoSet responds to flow limitation, and flow limitation often precedes snoring and apneas, AutoSet is able to preemptively treat apneic events and prevent more serious, subsequent events from occurring. The algorithm also monitors and compensates for unintentional leak.

Event detection and response

Some APAP algorithms detect events and apply a fixed pressure setting regardless of the extent of the event. ResMed's AutoSet, however, assesses the severity of the event—whether it is limited flow, snoring or an apnea—determines the best pressure solution, and applies it comfortably, without delay.

Enhanced AutoSet with CSA detection

The S9 AutoSet uses the forced oscillation technique (FOT) to determine the state of the airway during an apnea. When an apnea is detected, small oscillations are added to the pressure to measure airway patency. The CSA algorithm uses the resulting flow and pressure to measure airway patency and differentiate central and obstructive events.

ResMed was the first company to implement FOT for CSA detection.

S9™ | Series
More. Comfort.

S9™ Series More. Comfort.

S9 AutoSet – A complete comfort system

The S9 AutoSet combines an enhanced algorithm with Climate Control and whisper-quiet Easy-Breathe technology for a clinically exceptional system that improves patient comfort and long-term compliance.

Features

- Enhanced AutoSet with central and obstructive event detection and response
- Ramp in AutoSet and CPAP modes
- Easy-Breathe technology for unrivalled radiated and conducted noise control
- Easy-Breathe expiratory pressure relief (EPR™) – Option of EPR in both AutoSet and fixed CPAP modes
- Optional Climate Control
 - Absolute humidity delivery regardless of environmental changes
 - Temperature control for maximum comfort
- Algorithm compatibility with H5i™ humidifier, 15 mm SlimLine™ and ClimateLine™ tubing plus 19 mm standard tubing

Data reporting

- Summary, efficacy and usage data for up to 365 nights, including central apnea statistics
- 30 nights of detailed efficacy and usage data on additional parameters (eg, flattening index, snore, minute ventilation and oximetry)
- High-resolution patient flow data at 25Hz for 7 consecutive nights
- Optional sleep quality indicator to give patient feedback on their nightly therapy
- Optional SpO₂ oximetry module data reporting

What's the value? Four and more

In a recent study of 50 patients, ResMed's S9 increased patient daily usage by up to 30 minutes on average.⁴ Why? Patients rated superior breathing comfort and exceptional quiet among the top factors, along with the high performance humidification of Climate Control.

Rounded out with its stylish and user-friendly design, ResMed's S9 brings you the four tools you need to help your patients sleep through the four hour compliance threshold comfortably and feel the benefits of a good night's sleep.

Give your patients a system that delivers more. **Four and more.**

TECHNICAL SPECIFICATIONS

Operating pressure range

4 to 20 cm H₂O

Sound pressure level

24 dBA with uncertainty of 2 dBA as measured according to ISO 17510-1:2002

Dimensions (L x W x H)

6.0 x 5.7 x 3.4" (153 x 140 x 86 mm)

Weight

1.8 lb (810 g)

90W power supply unit

Input range 100-240V, 50-60Hz, 70w (80VA) (typical power consumption), >100VA (maximum power consumption)

Operating:

Temperature 41°F to 95°F (+5°C to +35°C)

Humidity 10-95%, non-condensing

Altitude sea level to 8,500' (2,591 m)

Storage and transport:

Temperature -4°F to 140°F (-20°C to +60°C)

Humidity 10-95% non-condensing

Housing construction

Flame retardant engineering thermoplastic

Supplemental oxygen

Recommended maximum supplemental oxygen flow: 4 L/min (not available with Climate Control)

Standard air filter

Polyester fiber

SlimLine air tubing

Flexible plastic, 6' (1.83 m), 15 mm inner diameter

Air outlet

The 22 mm conical air outlet complies with ISO 5356-1

Electromagnetic compatibility

Product complies with all applicable EMC requirements according to IEC60601-1-2, for residential, commercial and light industry environments.

Aircraft use

These S9 devices comply with US FCC Part 15, Class B requirements if no external data cables are used.

IEC 60601-1 classification

Class II (double insulation), Type BF

PRODUCT CODES

S9 AutoSet	36005
S9 AutoSet + H5i	36015
S9 AutoSet + H5i & ClimateLine	36025



¹ Teschler et al. *Eur Respir J* 2000 ² Hukins. *Sleep* 2004 ³ Massie et al. *Am J Respir Crit Care Med* 2003 ⁴ Study details at www.clinicaltrials.gov ID NCT01013207