



ResMed S8 Series Flow Generators Data Management User Guide

[Home](#) » [ResMed](#) » ResMed S8 Series Flow Generators Data Management User Guide 

Contents

- [1 ResMed S8 Series Flow Generators Data Management](#)
- [2 Viewing Data](#)
- [3 ResScan Downloaded Data](#)
- [4 ResScan Review Screens](#)
- [5 Glossary of Terms](#)
- [6 ResScan Review Screen Display Descriptions](#)
- [7 ResScan Detailed Graphs Specification](#)
- [8 Updating Settings](#)
- [9 ABOUT COMPANY](#)
- [10 Documents / Resources](#)
 - [10.1 References](#)
- [11 Related Posts](#)

RESMED

ResMed S8 Series Flow Generators Data Management



The following table shows where data from the S8 Series flow generators can be viewed. Data displayed in ResScan™ can be downloaded via:

- cable directly from the flow generator
- the SmartMedia™ card in the S8 ResLink™
- the ResScan Data Card.

Note: Please refer to your flow generator clinical guide for further details.

Viewing Data

Parameter	S8 LCD screens	ResScan	ResControl II™	
			View tab	PSG tab
Type of Data	STORED	STORED	LIVE	LIVE
S8 Escape™				
Usage	✓	✓		
S8 AutoSet Vantage™/S8 Elite™				
AHI/AI	✓	✓		
Events	✓	✓		
Flattening		✓1		✓
Flow (L/sec)				✓
Leak (L/sec)	✓	✓	✓	✓
Minute Ventilation (L/min)1		✓		
Pressure (cm H2O)	✓	✓	✓	✓
Pulse Rate (beats/min)1,2		✓		
Snore1		✓		
SpO2 (%)1,2		✓		
Tidal Volume (mL)				✓
Usage	✓	✓		

1. Only available if an S8 ResLink is attached to the flow generator.

2. Only available if an oximeter is used with the S8 ResLink.

ResScan Downloaded Data

	Via cable	Via S8 ResLink	Via ResScan Data Card
S8 Escape	✓ (180 summary sessions)		✓ (180 summary sessions)
S8 AutoSet Vantage/S8 Elite	✓ (365 summary sessions; 5 detailed sessions)	✓ (365 summary sessions; 30 detailed sessions)	✓ (180 summary sessions; 5 detailed sessions)

Note: S8 ResLink detailed data is at a higher resolution than data available via cable or ResScan Data Card.

ResScan Review Screens

	Statistics	Summary Graphs	Detailed Graphs	Oximetry Statistics (via S8 ResLink)
S8 Escape	✓	✓		
S8 AutoSet Vantage/S8 Elite	✓	✓	✓	✓

Glossary of Terms

• AHI (Apnea–Hypopnea Index)

- The Apnea–Hypopnea Index (AHI) is calculated by adding together the total number of apnea and hypopnea events over a period of time.
- For statistics, it is the total number of events divided by total daily usage. For graphs, the AHI count is incremented at the occurrence of every event and reset every hour.

• Apnea

An apnea is the temporary absence or cessation of breathing. An apnea is scored when there is reduction in breathing by 75% of the baseline breathing for at least 10 seconds.

• Daily Usage

Daily usage is total usage in a single session (a session starts at midday and finishes 24 hours later).

• Events

- An event is the occurrence of a residual apnea or hypopnea.
- Events are recorded as they occur. The maximum number of events stored per session is 500.

- Up to 2000 events may be stored if an S8 ResLink is used.

- **Flattening**

- Flattening is a measure of partial upper airway obstruction.
- This measurement is based on the shape of the inspiratory flow–time curve. A flat shape suggests upper airway obstruction.

- **Flow**

- Flow is an estimate of the airflow entering the lungs.
- It is derived by taking the total flow and then removing the leak and mask vent flow components.

- **Hypopnea**

A hypopnea is an episode of shallow breathing during treatment. A hypopnea is scored when there is a reduction in breathing by 50% of baseline breathing for 10 seconds or more. The event is scored after 10 seconds of the hypopnea.

- **Leak**

- Leak is an estimate of the total rate of air escaping due to mouth and mask leaks.
- It is derived by analyzing the inspiratory and expiratory airflows, together with the expected mask vent flows.
- High or changing leak rates may affect the accuracy of other measurements.

- **Minute Ventilation**

Minute ventilation is the volume of air breathed in (or out) within any 60-second period.

- **Pressure**

Pressure is an estimate of the pressure delivered at the mask.

- **Pulse Rate**

The number of heart beats in a 60-second time frame. The pulse rate is calculated by an attached oximeter.

- **Snore (Index)**

Snore index is the measure of the amplitude of the pressure wave generated by a patient's snoring.

- **SpO2**

The saturation of blood hemoglobin with oxygen, expressed as a percentage. The oxygen saturation is calculated by an attached oximeter.

- **Tidal Volume**

Tidal volume is the volume of air inspired or expired in one respiratory cycle (breath).

Total Hours Used

Total hours used is the total patient usage over a selected time range.

- **Usage**

- Usage is the length of time that a patient receives therapy from the device.
- The start and end times of the first ten (five for S8 Escape) individual periods of usage are available for each session when using ResScan.

- **Used Days**

Used days is the total number of days where daily usage exceeded the compliance threshold (X hours Y minutes).

- **% Used Days**

% used days calculates the percentage of used days out of the total number of days selected.

ResScan Review Screen Display Descriptions

	Statistics	Summary Graphs	Detailed Graphs	Oximetry Statistics (via S8 ResLink)
AHI/AI		<p>✓</p> <p>Shows a vertical bar graph</p> <p>where the lower segment is the median AI per hour, and the upper segment is the median AHI per hour.</p>	<p>✓</p> <p>Shows a cumulative total of</p> <p>the number of apneas and hypopneas that have occurred. The cumulative total is reset every hour, on the hour.</p>	
Events			<p>✓</p> <p>Apnea events are shown at</p> <p>the time they started. Apneas are shown as a red symbol where the height is proportional to the duration of the apnea. The number at the top of the symbol is the duration of the apnea in seconds.</p> <p>Hypopneas are recorded and made available after ten seconds. Hypopneas are shown as blue rectangles.</p>	

Flattening			✓ Shown on a scale ranging from flat to round.	
Leak (L/sec)	✓ Shows the maximum, 95th percentile and median statistics for the selected sessions in the Data Browser.	✓ Shows the maximum, 95th percentile, and median statistics for single sessions.	✓ Shown as a blue trace. A red line provides a reference level of the recommended maximum acceptable leak.	
Minute Ventilation (L/min)			✓ Shown as a blue trace.	

Pressure (cm H2O)	<p>✓</p> <p>Shows the maximum, 95th percentile and median statistics for the selected sessions in the Data Browser.</p>	<p>✓</p> <p>Shows the maximum, 95th percentile, and median statistics for single sessions.</p>	<p>✓</p> <p>Shown as a blue trace.</p>	
Pulse Rate (beats/min)			<p>✓</p> <p>Shown as a blue trace.</p>	✓
Snore			<p>✓</p> <p>Shown on a scale ranging from quiet to loud.</p>	
SpO2 (%)			<p>✓</p> <p>Shown as a blue trace. A red line provides the 90% reference level to assist identification of desaturations.</p>	✓

Usage	<p>✓</p> <p>Total hours used, Daily usage, Used Days³ X:YY hours, Used Days < X:YY hours, Total days and % Used Days. Calculated for the selected sessions in the Data Browser.</p>	<p>✓</p> <p>Each period is shown as a solid bar. A hollow bar indicates a period of usage where the end-time is unknown.</p> <p>There is a limit on the maximum number of separate bars that are shown for a single session.</p>		
-------	---	--	--	--

ResScan Detailed Graphs Specification

Parameter	Resolution	Range	Sampling period (sec)	
			via flow generator	via S8 ResLink
Events (sec)	1 (apnea duration)	10–60 (apnea duration)	Aperiodic1	Aperiodic2
Flattening	n/a	Round to flat	n/a	Every breath
Leak (L/sec)	0.02	0–5	60	2
Minute Ventilation(L/min)	0.1	0–180	n/a	2
Pressure (cm H2O)	0.2	0–25	60	2
Pulse Rate (beats/min) ³	1	18–300	n/a	5
Snore	n/a	Quiet to loud	n/a	Every breath
SpO2 (%) ³	1	0–100	n/a	1

1. The flow generator stores the first 500 events/session. When using a ResScan Data Card, only the first 200 events/session are copied.
2. The S8 ResLink stores the first 2000 events/session.
3. Only available if an oximeter is used with the S8 ResLink.

Updating Settings

Parameter	ResScan via cable	ResControl II	ResScan via ResScan Data Card1
S8 Escape			
Set Pressure (CPAP)	✓	✓	✓
Start CPAP	✓	✓	✓
Ramp Time	✓	✓	✓
Maximum Ramp	✓	✓	✓
Language	✓		
Local Date & Time	✓		
Altitude	✓		
Reminders	✓		✓
S8 AutoSet Vantage/S8 Elite			
Mode2	✓	✓	✓

Minimum Pressure2	✓	✓	✓
Maximum Pressure2	✓	✓	✓
Settling Time2	✓	✓	✓
Maximum Settling Time2	✓	✓	✓
Set Pressure (CPAP)	✓	✓	✓
Start CPAP	✓	✓	✓
Ramp Time	✓	✓	✓
Maximum Ramp	✓	✓	✓
EPR Setting	✓	✓	✓
EPR Type	✓	✓	✓
Leak Alert	✓	✓	
Mask	✓	✓	✓
Tube Length	✓		
Humidifier	✓	✓	
Language	✓		


Local Date & Time	✓		
SmartStart™/Stop	✓	✓	
Menu Type	✓		
Smart Data	✓		✓
Reminders	✓		✓

1. The ResScan Data Card allows you to enter a flow generator's serial number to target a specific patient.
2. S8 AutoSet Vantage only

ABOUT COMPANY

- ResMed Pty Ltd (Manufacturer) 1 Elizabeth MacArthur Drive Bella Vista NSW 2153 Australia
- ResMed Corp (US Designated Agent) 14040 Danielson Street Poway CA 92064-6857 USA
- ResMed (UK) Ltd (EU Authorized Representative) 65 Milton Park Abingdon Oxfordshire OX14 4RX UK
- ResMed Offices Australia, Austria, Finland, France, Germany, Hong Kong, Japan, Malaysia, Netherlands, New Zealand, Singapore,
- Spain, Sweden, Switzerland, UK, USA
(see www.resmed.com for contact details).
- Protected by patents and design registrations. Others pending. ResControl II, ResLink, ResScan, S8, S8 AutoSet Vantage, S8 Elite, S8 Escape and SmartStart are trademarks of ResMed Pty Ltd and AutoSet and SmartStart are registered in U.S. Patent and Trademark Office. SmartMedia is a trademark of Toshiba.
- ©2006 ResMed.

Documents / Resources

	ResMed S8 Series Flow Generators Data Management [pdf] User Guide S8 Series, Flow Generators Data Management, S8 Series Flow Generators Data Management, Flow Generators Data Management, Data Management
---	--

References

- [R Sleep apnea and COPD - learn about symptoms and treatment | ResMed](#)