

F&P Airvo™ 3 Junior

PT321XX¹ SPECIFICATION SHEET

The Airvo 3 Junior is a respiratory support device that delivers warmed and humidified respiratory gases to spontaneously breathing patients through a variety of patient interfaces.

The Airvo 3 Junior is designed to deliver Optiflow™ high flow therapy and bubble CPAP (BCPAP) to spontaneously breathing patients



Product specifications

Product code	PT321XX ¹
Box components	Airvo 3 Junior device (PT321XX ¹) x 1
	Outlet elbow (900PT930) x 1
	Battery (900PT957L) x 1
	Air filter (900PT933) x 2
	Power cord (900PT412XX ¹) x 1
	Power cord retainer (900PT956) x 1
Dimensions	Airvo 3 user manual x 1
	205 mm x 295 mm x 190 mm
Weight (including battery)	4.45 kg
Supply voltage/current	100 – 115 VAC, 2.4 A (2.6 A max ²) 220 – 240 VAC, 1.1 A (1.3 A max ²)
Supply frequency	50 – 60 Hz

Operating specifications

Intended use	
When used in BCPAP mode ³ :	Provide CPAP to spontaneously breathing neonates and infants up to 10 kg who require breathing support due to conditions associated with prematurity (such as Respiratory Distress Syndrome) or other conditions where CPAP is required or desired and is prescribed by a physician
When used in high flow mode:	Treatment of spontaneously breathing patients who would benefit from receiving high flow warmed and humidified respiratory gases
Location of use	Hospitals (for both HF and BCPAP)
Usage	Multi-patient use. Device must be cleaned and outlet elbow reprocessed between patients
Ambient temperature	18 – 28 °C
Humidity	10 – 95 % relative humidity (non-condensing)
Ambient pressure	700 – 1060 hPa
Altitude range	0 – 3000 m
Mode of operation	Continuous operation
Maximum surface temperature of applied parts ⁴	44 °C
Maximum delivered dew-point temperature of respiratory gas ⁴	43 °C

Optiflow high flow therapy⁵

Target humidity range	31 – 37 °C
Target flow range ⁶	2 – 70 L/min
Maximum limited pressure ⁷	60 cmH ₂ O
Maximum operating pressure	< 45 cmH ₂ O
Humidity (Wall power) ⁴	> 33 mg/L at 37 °C target humidity, 10 – 60 L/min target flow
	≥ 16 mg/L for all other settings

Bubble CPAP⁵

Target humidity range	31 – 37 °C
Target flow range ⁶	4 – 15 L/min

¹ XX indicates a country code, if applicable.

² Inrush current may reach 50 A.

³ Only use the 900PT58X breathing tube kits and BCPAP interfaces when in BCPAP mode.

⁴ In accordance with ISO 80601-2-74. Tested to an accuracy of ± 1 °C or ± 1 mg/L, as appropriate.

⁵ Values are expressed in body temperature, pressure, saturated (BTPS) in accordance with ISO 80601-2-74, unless otherwise stated.

⁶ Achievable flow rate depends on the patient interface selected.

⁷ In accordance with ISO 80601-2-90.

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Supplementary oxygen

High-pressure oxygen (HPO) inlet port

Line pressure:	280 – 600 kPa
Maximum flow rate:	100 L/min (STPD ⁸)
% Concentration:	93% or > 99%
Compatible accessories:	Allows connection to one or two oxygen supply sources via a HPO dual-input manifold (900PT460 ⁹)

Low-pressure oxygen (LPO) inlet port

Line pressure:	0 – 70 kPa
Maximum flow rate:	60 L/min (STPD ⁸)
% Concentration:	93% or > 99%

Battery

Chemistry	Lithium Ion (Li-Ion)
Voltage	14.4 VDC
Capacity, Power output	≤ 99.4 Wh, 80 W
Shelf life	3 years
Battery life	300 charge/discharge cycles or 2 years from first use (whichever comes first)
Recharge time	6 hours (maximum)
Operating time ¹⁰	
With Active Humidification	50 minutes
Without Active Humidification ¹¹	additional 40 minutes

Storage and transport conditions

Ambient temperature ^{12, 13}	-10 – 50 °C
Humidity (non-condensing)	10 - 95 % relative humidity

Composition

Materials not present	Not made with natural rubber latex or phthalates (DEHP, DBP, BBP)
Manufacturing mode	Manufactured in a controlled working environment
Disposal	
Device:	This device contains electronics and a lithium battery. Return to Fisher & Paykel Healthcare or dispose according to local guidelines for disposing of electronics
Accessories, spare parts and packaging:	Dispose according to local guidelines or hospital protocols for disposing of contaminated products

Regulatory

Country of origin	New Zealand
Notified body	TÜV SÜD Product Service GmbH CE 0123

⁸ Flow rate is expressed in STPD (standard temperature and pressure, dry) as per ISO 80601-2-74.

⁹ Available for three different connector types: DISS, NIST and SIS. HPO port connector type on the Airvo 3 will vary depending on region

¹⁰ Please refer to the User Instruction Appendix 4 for detailed explanation

¹¹ during 'Critically low battery' alarm condition

¹² Storage at temperatures above 40 °C for prolonged periods will accelerate battery degradation.

¹³ The device may require up to 24 hours to equilibrate to operating temperature before it is ready for use.

Please note that the information in this specifications sheet (including product information and images) is summarized and provided for illustrative purposes only. Please refer to the relevant user instructions for more information and confirm details with your local Fisher & Paykel Healthcare representative prior to placing an order. Information subject to change without notice.