F&P Airvo 3 NIV System

F&P Airvo™ 3 NIV

PT311XX[1] SPECIFICATION SHEET

The Airvo 3 NIV 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 NIV is designed to deliver Optiflow™ high flow therapy and non-invasive ventilation (NIV) to spontaneously breathing patients

[1]XX indicates a country code, if applicable.
[2]Inrush current may reach 50 A.
[3]In accordance with ISO 80601-2-74. Tested to an accuracy of ± 1 °C or ± 1 mg/L, as appropriate.
[4]Values are expressed in body temperature, pressure, saturated (BTPS) unless otherwise stated.
[5]Achievable flow rate depends on the patient interface selected.
[6]Maximum working pressure is ensured by a motor with end-of-hose pressure regulation.
[7]CPAP mode only.
[8]Dependent on a number of factors including mask fit and mask selection.
[9]Bi-level S/T and Bi-level PCV modes only.

Product specifications

Product code	PT311XX[1]
Box components	Airvo 3 NIV device (PT311XX[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
	Airvo 3 user manual x 1
Dimensions	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 NIV mode:	Non-invasive ventilator support for non-ventilator dependent, spontaneously breathing adult patients (30 kg and above) with respiratory insufficiency, or respiratory failure
When used in Optiflow 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 NIV)
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 Optiflow	0 – 3000 m
Altitude range NIV	0 – 1000 m
Mode of operation	Continuous operation
Maximum surface temperature of applied parts[3]	44 °C
Maximum delivered dew-point temperature of respiratory gas[3]	43 °C

Optiflow high flow therapy[4]

Target humidity range	31 – 37 °C
Target flow range[5]	2 – 70 L/min
Humidity (Wall power)[3]	> 33 mg/L at 37 °C target humidity, 10 – 60 L/min target flow
	≥ 16 mg/L for all other settings

Non-invasive ventilation[4]

Target humidity range	25 – 31 °C
Working pressure[6]	
CPAP range[7]	4 – 25 cmH_2O (+/- 1.5 cmH_2O + 5 % of set pressure)[8]
IPAP range[9]	4 – 30 cmH_2O (+/- 1.5 cmH_2O + 5 % of set pressure)[8]
EPAP range[9]	4 – 25 cmH_2O (+/- 1.5 cmH_2O + 5 % of set pressure)[8]
Intended delivery volume	> 50 mL

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

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

[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.

[14] Please refer to the User Instruction Appendix 4 for detailed explanation

[15] During 'Critically low battery' alarm condition

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.

Supplementary oxygen

High-pressure oxygen (HPO) inlet port	
Line pressure:	280 – 600 kPa
Maximum flow rate:	100 L/min (STPD[10]) NHF 200 L/min (STPD[10]) NIV
% Concentration:	93% or > 99%
Compatible accessories:	Allows connection to one or two oxygen supply sources via a HPO dual-input manifold (900PT460[11])
Low-pressure oxygen (LPO) inlet port	
Line pressure:	0 – 70 kPa
Maximum flow rate:	60 L/min (STPD[10])
% Concentration:	93% or > 99%

Storage and transport conditions

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

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[14]	
With Active Humidification	50 minutes
Without Active Humidification[15]	additional 40 minutes

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

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