



COVIDIEN

positive results for life™

Airox™ Smartair™ Plus Ventilator

A pressure support ventilator that offers the flexibility of invasive or noninvasive ventilation (leakage or valve ventilation)

A SMART CHOICE FOR INVASIVE AND NONINVASIVE VENTILATION

The Smartair™ Plus ventilator allows leakage or valve ventilation, enabling patients to keep the same device if their health condition eventually changes to require invasive ventilation. Prior to each use, the unit will initiate a post-test for single or double-limb circuit recognition and capability.

OXYGEN ENRICHMENT

The Smartair Plus ventilator is equipped to receive oxygen supplied from an external low pressure source. The FiO₂ concentration can reach up to 50% of oxygen.

PORTABILITY

The Smartair Plus ventilator integrates lithium-ion batteries that provide up to five hours of portable operation. An external converter recharges the internal battery and provides a 24 V connection for an external battery (Open Pack™ connection) for additional battery life and mobility.

V_T TARGET FEATURE

The V_T Target feature allows you to set a volume target within pressure control mode, thanks to automatic pressure adjustment. As patients sleep and move about, V_T Target works to maintain the established tidal volume setting (when in pressure mode) to improve alveolar ventilation optimization, potentially reducing nocturnal hypoventilation.

COMFORT AND CONVENIENCE

- Quiet device: less than 28 dBA at 10 mbar
- Lightweight: only 3.2 kg
- Choose from several ventilation modes based on patient need: CPAP, PSV S / PSV ST, PCV / PACV
- Auto On feature: ventilation starts when the patient inhales
- Sleeping ramp (5 to 25 minutes) and four levels of rise time
- V_T Target: Ability to set target volume with maximum pressure
- Precise pressure and flow sensors with adjustable I and E triggers
- Display screen shows patient and monitoring menus



USER-FRIENDLY DESIGN

- Intuitive navigation and settings
- Only three keys for all settings
- LCD screen with patient monitoring
- Parameters can be locked

PATIENT MONITORING

Comprehensive patient monitoring for all ventilation modes: V_T , leakage, rate, I/T ratio, patient trigger and low/high volume indication according to target.

CPAP SETTINGS


Parameters	Leakage ventilation	Ventilation with exhalation valve
Conatant pressure	4-25 mbar	N/A
Auto ON	YES / NO	N/A
Sleep ramp	YES / NO	N/A

CPAP
▶ **IPAP** : 18 mbar
Options

CPAP
▶ **Auto ON** : YES

PRESSURE SUPPORT SETTINGS PSV S / PSV ST MODE

Parameters	Leakage ventilation	Ventilation with exhalation valve
I_{PAP}	6 - 30 mbar	5 - 30 mbar
E_{PAP}	4 - 20 mbar	0 - 20 mbar
Slope (rise time)	4 levels	4 levels
Back up rate	4 - 40	4 - 40
Trigger E (exhalation trigger)	-15% to -75%	-15% to -75%
Trigger I (inspiratory trigger)	5 levels	5 levels
V_T Target	100 - 1250 mL	100 - 1250 mL
Maximum pressure (to reach V_T Target)	+04 to +15 mbar	+04 to +15 mbar
Min V_T Alarm	50 - 1000 mL	50 - 1000 mL
Apnea Time	3 - 30 s	3 - 30 s
Auto ON	Yes / No	Yes / No
Sleep ramp	Yes / No	Yes / No
Ti min	0.1 s - 3 s	0.1 s - 3 s
Ti max	0.8 s - 3 s	0.8 s - 3 s

PSV ST
▶ **IPAP** : 18 mbar
EPAP : 5 mbar
Ramp 


PSV ST
Rate : 15 c/min
▶ **Trigg E** : 25 %
Options

PSV ST
▶ **Trigg I** : 2
 V_T Target : 500 mL
Pi maxi : 18+5 mbar

PSV ST
 V_T Alarm : 400 mL
Auto ON : YES
▶ **Apnea Time** : 5

PRESSURE SUPPORT SETTINGS PCV / PACV MODE

Parameters	Leakage ventilation	Ventilation with exhalation valve
I_{PAP}	6 - 30 mbar	5 - 30 mbar
E_{PAP}	4 - 20 mbar	0 - 20 mbar
Slope (rise time)	4 levels	4 levels
Back up rate	4 - 40	4 - 40
I/T Ratio	50% to 25%	50% to 25%
Trigger I (inspiratory trigger)	5 levels	5 levels
V_T Target	100 - 1250 mL	100 - 1250 mL
Maximum pressure (to reach V_T Target)	+04 to +15 mbar	+04 to +15 mbar
V_T maxi alarm	150 - 3000 mL	150 - 3000 mL
V_T mini alarm	50 - 1000 mL	50 - 1000 mL
Fr maxi alarm	10 - 120 bpm	10 - 120 bpm
Auto ON	Yes / No	Yes / No
Sleep ramp	25 min	25 min

PCV (PACV)
▶ **IPAP** : 18 mbar
EPAP : 5 mbar
Ramp 

PCV (PACV)
▶ **Trigg I** : 2
 V_T Target : 500 mL
Pi maxi : 18+5 mbar

PCV (PACV)
▶ **Rate** : 15 c/min
I/T : 33 %
Options

PCV (PACV)
 V_T Alarm : 400 mL
▶ **Auto ON** : YES

SIMPLIFIED MAINTENANCE

- Quick and easy access to all technical components
- Micro-turbine with no maintenance for 15,000 hours
- RS 232 port for software upgrading
- Maintenance menu allows several diagnostics and sensor calibration
- Event memory allows for viewing of ventilation alarms, technical events and other occurrences directly on the display
- Display shows patient and device hour meters

TECHNICAL DATA CHART

Medical device class	II B
Weight	3.2 kg
Dimensions	123 x 200 x 290 mm
Power supply	external (0.6 Kg) 115/230 V $\pm 10\%$ - 50/60Hz with a 24V connector.
Internal Battery	Lithium Ion quickcharge. 2 to 5 hours of autonomy
Alarm	Disconnection, Tidal volume, Apnea, power cut, batteries and technical messages.

ACCESSORIES AND PRODUCT REFERENCES CHART

REFERENCES	DESCRIPTION
4095500	Smartair Plus (Equipped with: external power supply, user's manual, carrying bag and one single use patient circuit with exhalation valve.)
4095501 (UK)	Smartair Plus (Equipped with: external power supply, user's manual, carrying bag and one single use patient circuit with exhalation valve.)
ACCESSORIES	
3804000	Carrying bag
3808000	Proximal pressure connector (bag of 10)
2962700	Oxygen inlet connector (bag of 10)
CIRCUITS	
5092800	Adult single limb circuit with exhalation valve 180 cm – single use
5093300	Adult single limb circuit without valve 180 cm – single use
5093400	Adult single limb circuit without valve 180 cm – reusable
5092700	Pediatric single limb circuit with valve 180 cm – single use
5093100	Pediatric single limb circuit without valve 180 cm - single use
5093200	Pediatric single limb circuit without valve 180 cm – reusable
DISPOSABLES	
2963300	Air intake combi filter (foam + fine particule) (bag of 6)



This product is available in many countries around the world; however it has not received FDA clearance for marketing the device and is not for sales in the US.

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