

Care the Future
Carry the Hope

VS500S

Premature, Neonatal & Pediatric Ventilator

Technical Data

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Patient Type		
	Premature infant, Neonate, Pediatric (300g-40kg)	
Ventilation Modes		
	NCPAP, NIPPV, SNIPPV, HFNC	
Parameter Setting		
Project	Scope	Work mode
CPAP	1-23cmH ₂ O	NCPAP
FiO ₂	21%-100%	NCPAP, NIPPV, SNIPPV, HFNC
EPAP	1-23cmH ₂ O	NIPPV, SNIPPV
IPAP	2-25cmH ₂ O	NIPPV, SNIPPV
Ti	0.1 s-15 s	NIPPV, SNIPPV
f	1 bpm-120 bpm	NIPPV, SNIPPV
Trigger	1-10 level	SNIPPV
Flow	300 g-10 Kg patient: 0.5 L/min-20 L/min	HFNC
	> 10 Kg patient: 0.5 L/min-40 L/min	
Pmanual	2-25cmH ₂ O	NCPAP
Pbackup	2-25cmH ₂ O	NCPAP
fbackup	1 bpm-120 bpm	NCPAP
Tibackup	0.1s~15s	NCPAP
Alarm Limit Setting		
High FiO ₂	OFF, 21%-100%	
Low FiO ₂	OFF, 20%-99%	
High Paw	2-30cmH ₂ O	
Low Paw	OFF, 1-29cmH ₂ O	
High PEEP	OFF, 2cmH ₂ O-25cmH ₂ O	
Low PEEP	OFF, 1cmH ₂ O-22cmH ₂ O	
Too high frequency	10 bpm-140 bpm	
Too low frequency	1 bpm-139 bpm	
High pulse rate	35 PR/min-240 PR/min	
Low pulse rate	30 PR/min-235 PR/min	
Low SpO ₂	70-99%	
High SpO ₂	71-100%	
Low PI	0%-19%	
Monitoring Data		
Pressure value	Ppeak, PEEP, Pmean	
Flow value	Flow	
Time value	f.spont, f.total	
Real time curves	Pressure-Time, Flow-Time, SpO ₂ -Time waveforms	
Gas monitoring	FiO ₂ , SpO ₂	
Calculated value	SpO ₂ /FiO ₂ , OSI	
Other value	PI, PR	
Parameter Monitoring Range		

Ppeak Pmean PEEP	-20cmH ₂ O- 120cmH ₂ O	
FiO ₂	18%-100%	
f.total	0 bpm-250 bpm	
Flow	0 L/min-60 L/min	
SpO ₂	0%-100%	
PR	30 PR/min-240 PR/min	
PI	0%-20%	
f.spont	0 bpm-250 bpm	
Alarm Information		
Alarm message	Paw high/low, FiO ₂ high/ low, PEEP low, Apnea, Low SpO ₂ , Low pulse rate, High/Low respiratory rate, Low air source pressure, Low oxygen source pressure, Circuit disconnect, Occlusion, Battery exhausted, Low battery, BDU communication failure, PS communication failure, External power disconnect, Oxygen sensor failure, oxygen concentration is less than 18%	
Alarm light	Red: advanced alarm	
	Yellow: middle and low alarm	
Alarm visible distance	Within 4 meters	
Alarm message visible distance	Within 1 meter	
Alarm sound pressure (1 meter away)	≥60 dB	
Enhancements		
	Apnea back-up ventilation Waveform freeze O ₂ flush Manual ventilation Trend Event/Alarm log Screen lock Standby Alarm silence	
Other Settings		
Alarm volume	20, 40, 60, 80, 100%	
Trend	72H	
Event log	1500 messages	
Alarm log	1500 messages	
Screen brightness	20, 30, 40, 50, 60, 70, 80, 90, 100%	
Language		
	Chinese, English and others	
Environmental Requirements		
Temperature	Operating condition	+5°C-+40°C
	Storage condition	-20°C-+60°C
Relative humidity	Operating condition	15%-95% non-condensing
	Storage condition	10%- 95% non-condensing
Barometric pressure	Operating condition	54 kPa-106 kPa
	Storage condition	50 kPa-106 kPa
Transportation	Applicable to land, air and sea transportation	
Enclosure Protection Rating	IP21	
Noise	The average noise at 1 meter away from the machine is ≤50 dB(A)	
Electrical		
External AC power	Input voltage	100-240 V

	Power frequency	50/60 Hz
	Input power consumption	120VA
Internal battery power	Battery	1
	Type	Lithium battery
	Nominal voltage	14.4 Vdc
	Nominal capacity	6.6 Ah
	Charging duration	4 hours
	Life time	3 years; 300 cycles of full charge
	Power duration	Minimum 4 hours
Gas Supply		
Supply Gas (Air & O ₂)	200-650 kPa (29-94 psi)	
Connection standard	DISS, NIST	
Display range (Air & O ₂)	0-40 L/min	
Physical Specifications		
Dimension (main unit)	337.4* x 300*x 343* mm	
Main unit weight (including battery)	11 kg	
Screen size & resolution	10.4" capacitive color touch screen; 800x600 pixel	
Communication port	Nurse call port, Ethernet Port, R232 port, USB port,	



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