

prunus

Padus 8Ventilator

Datasheet



prunus

Technical Specification

Physical Specification		
Dimensions and weight		
Dimensions (HxWxD)	1600mm×500mm×650mm	
Weight	55 kg (two cylinders included)	
	35 kg (trolley included)	
	21 kg (trolley excluded)	
	Note: The overall weight covers the main unit (including one battery), display and trolley, and does not include the breathing tube, CO ₂ module, SpO ₂ module, support arm and humidifier	
	17” TFT display	
Display resolution	1920 ×1200	
Brightness	Adjustable	
Communication interface		
Communication interface	RS 232, HDMI, USB, USB OTG, LAN2	
Ventilation Specifications		
Patient type	Adult, pediatric, infant	
Ventilation mode	Invasive modes	VCV PCV PRVC SIMV (V) +PS SIMV (P) +PS SIMV (PRVC) +PS CPAP PSV DualPAP VSV
	Non-invasive modes	PCV PSV CPAP HFNC DualPAP SIMV(P)+PS
Control Parameters		
O ₂ concentration	21 ~100%	
VT	Adult: 100 ~4000 mL Pediatric: 10 ~300 mL Infant: 2~ 100 mL	
RR (Respiratory rate)	Adult/pediatric: 1~ 100 bpm Infant: 1~ 150 bpm	

Respiratory rate in SIMV mode	Adult/pediatric: 1~ 100 bpm Infant: 1~ 150 bpm
I:E	4:1 1:10
Ti	0.1 ~10 s
Tslope (Pressure rising time)	0 ~2.0 s
Tpause	OFF, 5% ~60%
Flow	Adult: 6~ 180 L/min Pediatric: 6~ 60 L/min Infant: 2~ 30 L/min
Pinsp	1 ~100 cmH ₂ O
	1 ~100 cmH ₂ O
	1 ~100 cmH ₂ O
	0, 1~ 50 cmH ₂ O
	0 ~50 cmH ₂ O
Ftrig	Adult/pediatric: 0.2 ~20 L/min Infant: 0.1 ~5 L/min
Ptrig	-20 ~-0.1 cmH ₂ O
	5%~85%
Sigh	
Sigh switch	ON, OFF (This function is OFF by default.)
Tinterval	1-180 min
cycles	1-20
PEEPint	0-20 cmH ₂ O
	ET Tube
Tube size	2~12 mm
Tube compensation	0~100%
HFNC	
O ₂ concentration	21~100%
Fbasic	Adult/pediatric: 2~ 60 L/min Infant: 2~ 20 L/min
CPAP	0 ~50 cmH ₂ O
	0~100 L/min
Monitoring parameters	
Airway pressure	-45 ~120 cmH ₂ O
	0 ~6000 mL
RR (Respiratory rate)	0 ~200 bpm

MV	0 ~100 L/min	
Resistance	0 ~600 cmH ₂ O/(L/s)	
	0 ~300 mL/cmH ₂ O	
₂ concentration	15 ~100%	
RSBI	0 ~9999 bpm/L	
WOBp	0 ~20 J/L	
WOBv	0 ~20 J/L	
WOBI	0 ~20 J/L	
P0.1	0 ~30 cmH ₂ O	
	-45 ~0 cmH ₂ O	
	0 ~120 cmH ₂ O	
	0 ~10 s	
I:E	150:1 ~1:150	
Peak flow	0 ~300 L/min	
Expiratory flow	0 ~200 L/min	
Waveforms	Pressure-time, Flow-time, Volume-time Optional: CO ₂ -time, SPO ₂ -time	
	Volume-Pressure, Flow-Volume, Flow-Pressure, CO ₂ -Volume	
VT	High	Adult: 110 ~6000 mL, OFF Pediatric: 25 ~600 mL, OFF Infant: 3~ 200 mL, OFF
	Low	OFF, 50 ~5995 mL
MV	High	Adult: 0.2 ~100.0 L/min, OFF Pediatric: 0.2 ~60.0 L/min, OFF Infant: 0.02 ~30.0 L/min, OFF
	Low	Adult: OFF, 0.1 ~50.0 L/min Pediatric: OFF, 0.1 ~30.0 L/min Infant: OFF, 0.01 ~15.0 L/min
Paw	High	10 ~105 cmH ₂ O
RR	High	2 ~160/min, OFF
	Low	OFF, 1~ 160/min
Apnea alarm	5 ~60 s	
Other alarms	EtCO ₂	
	InCO ₂	
	SpO ₂	
	Air source	
	O ₂ source	
	Graphic (curve)	
Length	72 h	
Content	Changes in parameter measurement results.	
Event Logs		

Type	Alarms, settings, and functions
Max number	5000
Histogram	
Length	72 h
Content	Tidal volume (horizontal axis) -Respiratory cycles (vertical axis) Respiratory rate (horizontal axis) -Respiratory cycles (vertical axis) Peak pressure (horizontal axis) -Respiratory cycles (vertical axis) Minute volume (horizontal axis) -Respiratory cycles (vertical axis)
Screen Capture	
Max number	At least 20 pictures
Ventilator components	
O₂ sensor	
	Chemical oxygen, paramagnetic sensor
Response time	Chemical oxygen 30 s Paramagnetic sensor 20 s
Infant flow sensor	
Flow range	-40 ~40 L/min
Dead space	1.3 mL
Resistance	4.34 cmH ₂ O/(L/min)
2 Module	
	EtCO ₂ , InCO ₂
EtCO ₂ measurement range	0 ~25%
Resolution	0.1
Waveforms	CO ₂ -time
	50 ±10 sml/min
System response time	< 3s
Rise time	350 ms
EtCO ₂ High alarm limits	1 ~26%
EtCO ₂ Low alarm limits	OFF 0~ 25%
TiniStream CO₂ Module	
	EtCO ₂ , InCO ₂
EtCO ₂ measurement range	0 ~20%
Resolution	0.1%
Waveforms	CO ₂ -time
	50ml/min ±10ml/min
System response time	3s (length of sampling line: 2m)
Rise time	180 ms

EtCO ₂ High alarm limits	1 ~20%	
EtCO ₂ Low alarm limits	OFF 0~ 19%	
MainStream CO ₂ Module		
	EtCO ₂ , InCO ₂	
EtCO ₂ measurement range	0 ~25%	
Resolution	Within the EtCO ₂ range of 0%~15%, the error is ±(0.2%+2% the actual reading)	
	CO ₂ -time	
	< 1s	
EtCO ₂ High alarm limits	1 ~26%	
EtCO ₂ Low alarm limits	OFF 0~ 25%	
SpO ₂ module		
	SpO ₂ , PR	
SpO ₂ measurement range	0 ~100%	
PR measurement range	25 ~250/min	
Waveform	Pleth	
SpO ₂ High alarm limits	81 ~100%	
SpO ₂ Low alarm limits	80 ~99%	
Operation Data		
Environmental specifications		
Temperature	Operation	10 ~40°C
	Storage and transport	-20 ~60°C
Relative humidity (non-condensing)	Operation	15% ~95% R.H.
	Storage and transport	10% ~95% R.H.
Atmospheric pressure	Operation	54 ~106 kPa
	Storage and transport	50 ~106 kPa
Gas supply		
Gas type	Air, O ₂	
Input connector	NIST or DISS	
Gas source pressure	280 ~650 kPa	
Maximum flow	180 L/min	
Power and Battery Backup		
Input voltage	100 ~240 V	
Input frequency	50/60 Hz	
Input current	2.5 ~1.2 A	
Fuse	T3.15 AH 250 V× 2, 5 ×20	
Number of battery	1 (standard) 2 (optional)	
Rated battery voltage	11.1 VDC	
Battery type	Lithium ion battery	
Battery capacity	The capacity of single battery is 7800 mAh	

	The capacity of two batteries is 15600 mAh
Battery run time	At least 90 minutes (when anew fully charged battery is used in typical operating mode) At least 180 minutes (when two new fully charged batteries are used in typical operating mode)
Battery charging time	About 7hours
Special Functions and procedures	
Inspiratory hold	
Expiratory hold	
PV tool	
Automatic tube compensation	
Sigh	
Manual ventilation	
Nebulizer	
Suction	
Flow support	
P0.1	
Stress index	
Maximum negative inspiratory pressure	
PEEPi	
Esophageal and gastric pressure monitoring	
PTP	
Work of breathing	
Dynamic lung display	



Shenzhen Prunus Medical Co., Ltd.

6th Floor and Zone A of 9th Floor, Block C, No. 71-3, Xintian Road, Fuyong Street
Bao'an District, 518103 Shenzhen, Guangdong, PEOPLE'S REPUBLIC OF CHINA

Tel: +86 755 2689 9781
Fax: +86 755 2689 9789
E-mail: international@prunusmedical.com
Web: www.prunusmedical.com