

PULSE

Adult Pediatric Neonatal

ICU VENTILATOR

Breathing Made Easy, Redefining
Respiratory Care

The **SH320** is a versatile ICU ventilator for neonates, pediatrics, and adults. It features turbine technology, an 18.5-inch touchscreen, and supports invasive, non-invasive, and high-flow oxygen therapy clinical applications.



Ventilation Mode

VCV

VCV

PCV

PCV

AGSS

SIMV - V

SIMV-P

SIMV - P

CPAP/PSV

CPAP/PSV

PRVC

PRVC

APRV

APRV

VS

VS

SMV

SMV

SIMV-P

CPRV

SIMV

SIMV- PRVC

Dualvent

Dualvent



Main features

1. Ultra-long battery life, one battery for 3 hours, two batteries for 6 hours
2. Comprehensive monitoring parameters, comprehensive safety protection
3. Sequential therapy with both invasive and non-invasive, oxygen therapy capabilities
4. Rich auxiliary functions (lung recruitment tools, PV tools, PEEPI monitoring)
5. Tidal volume from 2mto 4000ml, widely applicable to neonate, pediatric and adult
6. 18.5-inch color touch screen, multiple languages available;
7. Five waveforms ,four loops have a more intuitive understanding of patients.



Product Specification

Category	Parameter	Specification
Physical	Dimensions (HWD)	365mm × 385mm × 245mm (Excluding trolley)
	Weight	Approximately ≤12Kg (Main unit)
Display	Screen	13.3 or 15.6 color active matrix capacitive touch screen
	Brightness	Adjustable
Interface	Connectivity	Network, RS-232, Nurse call connector, HDMI, USB port
Ventilation	Patient Type	Adult, Pediatric, Neonate
Ventilation Mode	Invasive Modes	Adult: VCV, PCV, SIMV-V, SIMV-P, CPAP/PSV, PRVC, SIMV-PRVC, DualVent, APRV, VS, SMV, CPRV Pediatric: VCV, PCV, SIMV-V, SIMV-P, CPAP/PSV, PRVC, SIMV-PRVC, DualVent, APRV, VS, SMV Neonate: VCV, PCV, SIMV-V, SIMV-P, CPAP/PSV, DualVent, APRV, VS
	Non-Invasive	Adult/Ped: CPAP/PSV, PCV, SIMV-P, DualVent, APRV, PSVS/T Neonate: PCV, PSV, nCPAP, PSV-S/T
Controlled Parameters	O2%	21 to 100%
	Tidal Volume	Adult:100-4000 ml, Pediatric:20-300 ml, Neonate:2-100 ml
	f(Ventilation frequency)	Adult/Pediatric:1-100 /min, Neonate:1-150 /min
	fsimv	1-80 /min
	I:E	1:10-10:1
	T _{insp} (Inspiratory time)	0.1-12 s
	T _{slope} (Time of pressure rising)	0.00-2.00 s
	Thigh	0.1-30 s
	Tlow	0.2-30 s

Category	Parameter	Specification
	Pinsp	Adult:5-80 cmH2O, Pediatric:5-80cmH2O, Neonate:3-80cmH2O
	Pssup	0-80cmH2O
	Phigh	0-80cmH2O
	Plow	0-50cmH2O
	PEEP	OFF,1-50cmH2O
	Flow trigger	Adult/Pediatric:0.5-20 L/min, Neonate:0.1-5.0 L/min
	Pressure trigger	(-20 to -0.5) cmH2O
Apnea Ventilation	Tidal Volume apnea	Adult:100-4000 ml, Pediatric:20-300 ml, Neonate:2-100 ml
	Papnea	5-80cmH2O
	fapnea	Adult/Pediatric:1-100 /min
	Apnea Tinsp	0.1-12 s
Monitored parameters	Airway pressure range	Ppeak,Pplat,Pmean:-20 to 120 cmH2O PEEP:0-120 cmH2O
	Tidal Volume range	0-6000ml
	Frequency range	ftotal,fmand,fspn:0-200/min
	Minute volume range	MVi,MVe,MVspn: Adult/Pediatric:0-100 L/min Neonate:0-30 L/min
	Resistance	0-600 cmH2O
	Compliance	0-300 ml/cmH2O

Category	Parameter	Specification
Monitored parameters	FIO2	15-100 vol.%
	RSBI	0-9999 1/(min*L)
	WOB	0-100 J/min
	P0.1	-20 to 0 cmH2O
	NIF	-45 to 0 cmH2O
	PEEPi	0-120 cmH2O
	PIF	Adult/Pediatric:0-180 L/min, Neonate:0-30 L/min
	PEF	Adult/Pediatric:0-180 L/min, Neonate:0-30 L/min
	EEF	Adult/Pediatric:0-180 L/min, Neonate:0-30 L/min
	Waveforms	Airway pressure-time, Flow-time, Volume-time,CO2-time
	Loops	Paw-Volume, Flow-Volume, Paw-Flow,Volume-CO2
Alarm settings	Minute Volume	High: Adu:200-10000 ml, Ped:200-6000 ml ,Neo:20-3000 ml Low: Adu:100-5000 ml, Ped:100-3000 ml, Neo:10-1500 ml
	Tidal Volume	High: Adu:110-6000 ml, Ped:25-600 ml, Neo:3-200 ml Low: Adu:50-5995 ml, Ped:10-595 ml, Neo:1-195 ml
	Airway pressure	High: 10-105 cmH2O, Low: 1-100 cmH2O
	Frequency	High: Adu/Ped:1-100 /min, Neo:1-160 /min Low: Adu/Ped:1-98 /min, Neo:1-158 /min
	FIO2	High: 20-100 vol.%, Low: 18-98 vol.%
	Apnea alarm time	5 to 60s
	Other alarms	Low battery voltage, Gas supply pressure low, Airway obstruction, Tube disconnected, PEEP too high

Category	Parameter	Specification
Trend	Type	Tabular, Graphic
	Length	72 hours
	Content	Monitor Parameters, Setting Parameters
Log	Type	Alarm, Operation
	Max number	5000
Screen Capture	Max number	50 pictures
	Ventilator components	O2 sensor
		Type : Calvanic fuel cell,paramagnetic sensor
		Response time : <25s
Neonatal flow sensor	Flow Range	0.2 to 30 L/min
	Resistance	6 cmH2O@2.5L/min
MainStream CO2 Module	EtCO2 measurement range	0 to 150 mmHg
	Resolution	1 mmHg
	Waveforms / Loop	CO2- time, Volume - CO2
	System response time	< 2 S
	End tidal carbon dioxide	Upper limit:0.1-20 vol.%, Lower limit:OFF,1-19.9 vol.%
SpO2 module	Operation Data Environmental specifications	Temperature : 10 to 40°C(operating): -20 to 60°C (storage)
		Relative Humidity : 10 to 95 % (operating); 10 to 95 % (storage)
		Barometric Pressure : 62 to 106 kPa (operating); 50 to 106 kPa(storage)

Category	Parameter	Specification
SpO2 module	Gas supply	Gas type : O2
		Pipe Connector : NIST, DISS
		Gas supply pressure : High pressure oxygen source:0.28 to 0.65MPa Low pressure oxygen source:Less than 100Kpa
	Power and Battery Backup	Power input voltage : 100 to 240 V
		Power input frequency : 50/60 Hz
		Fuse : T3.15AH/250V
		Number of batteries : One or Two
		Battery type : Build-in Lithium-ion battery, 14.4 VDC,
		Battery run time : 150 min (Powered by one new fully-charged battery in standard working condition)

ZuvioTechnologies Private Limited

1st Floor, Plot No. 646. 27th Main,
Road, HSR Layout, Sec-1, Bengaluru
560102.

+91 9071 1011 08

info@pulseio.in

www.pulseio.in

