HF-S1900A

ICU VENTILATOR

Application

This product is intended for use in an intensive care unit within a specialized medical facility, or during transit within a specialized medical facility. It is used for ventilation assistance and respiratory support for adult,pediatric and neonatal. This product should be handled by well-trained, authorized medical person.
This product cannot be used in magnetic resonance imaging (MRI) environments.

Features

- Electronically driven and electronically control
- 15.6 Inches colorful touch LCD screen
- Volume control and pressure limit
- Both non-invasive and invasive ventilation mode
- Various alarming function
- Compliance compensation function
- Built-in battery, when AC power failure, automatic exchange to backup power
- Same brand medical trolley
- ETCO2 monitoring
- SPO2 monitoring
- Operation key freeze function
- Oxygenation function
- HFNC Function
- Oxygen therapy function
- Diagnosis Function (PEEPi, NIF, P0.1)

Friendly interface

With neonatal, pediatric and adult mode.
Tidal volume start with 2ml, ensure all range patient using.
Different color choice ensure better view of waveform.
Automatic self testing ensure the safety using environment.

Humidifier

Heat and wet breathing gas, makes it more comfortable for patient to breathe in.
3 types of humidifier for your choices: one with thermometer for standard, one with digital shown for option, another one with dual pipeline heating function and servo control function for option.

Breathing circuit

High temperature resistance breathing piplines is reusable and anti-polution.

Oxygen concentration sensor

TECHNICAL SPECIFICATION

Ventilation mode

V-A/C, P-A/C, V-SIMV, P-SIMV, CPAP/PSV, PRVC,PRVC- SIMV, DuoLevel, APRV, CPRV, PSV-S/T, PSV, NCPAP, SIGH, MANU

Technical specification adjusting parameter

Freq	1 /min ~ 150 /min
	SIMV mode：1 /min ~ 60 /min
	Adult：1 /min ~1 00 /min
	Neonatal：1 /min ~ 150 /min
Tinsp	0.10 s ~ 10.00 s
I:E	4:1 ~ 1:10
VT	Adult：100 mL ~ 2000 mL
	Pediatric：20 mL ~ 300 mL
	Neonatal：2.0 mL ~ 100 mL
PEEP	OFF,1 cmH_2O ~ 50 cmH_2O
	-20 cmH_2O ~ -0.5 cmH_2O
	Turn off auxiliary triggering
Ftr	0.5 L/min ~ 20.0 L/min
	Turn off auxiliary triggering
△P	Adult, Pediatric：5 cmH_2O ~ 80 cmH_2O
	Neonatal：1 cmH_2O ~ 80 cmH_2O
Ps	0 cmH2O ~ 80 cmH_2O
Oxygen concentration	21 % ~100 %
Tip	OFF, 5 % ~ 60 %
Sigh cycle	1 ~ 20 times
Suffocation warning	5 s ~ 60 s
Airway pressure	10 cmH_2O ~ 85 cmH_2O
Pressure limit	≤115 cmH_2O
Neutralizer gas	Maximum output flow 6 L/min~9 L/min

Wooden case packing size

Main engine：L 610 * W 540 * H 730 mm	G.W.：38 KG
Trolley：L 966 * W 720 * H 550 mm	G.W.：48KG
Gas cylinder：L 650 * W 330 * H 290 mm	

Alarm and protection

High airway pressure alarm	Suffocation warning
High tidal volume alarm	Oxygen deficit
Low tidal volume alarm	High $ETCO_2$ Alarm
High minute volume alarm	Low $ETCO_2$ Alarm
Low minute volume alarm	High respiratory rate alarm
High oxygen concentration alarm	Low respiratory rate alarm
Low oxygen concentration alarm	Pressure safety relief valve
High positive end-tidal pressure alarm	Continuous pressure alarm

Working condition

Voltage	100 - 240V ~
Frequency	50/60Hz
Input power	100VA
Gas source	O_2 (Medical grade)
Gas pressure	280 kPa ~ 600 kPa
Ambient temperature range	+ 5 ℃ ~ + 40 ℃

Monitoring parameter

Frequency (Freq)	0 /min ~ 200 /min
Tidal volume (Vt)	0 mL ~ 4000 mL
MV	Adult, Pediatric：0.0 L/min ~ 100.0 L/min
	Neonatal：0.0 L/min ~ 30.0 L/min
Airway pressure	-20 cmH_2O ~ 120 cmH_2O
Dynamic lung compliance monitoring	0 mL/cmH_2O ~ 300 mL/cmH_2O
Oxygen concentration	15 % ~ 100 %
$ETCO_2$ Concentration	0 mmHg ~ 150 mmHg
Oxygen concentration	0 % ~ 100 %

Oscillogram

P-T (Pressure-Time)
F-T (Flow-Time)
V-T (Volume-Time)
CO_2 -T (End-Tidal CO_2 - Time)/（SPO_2 - T）
P-V Loop (Pressure-Volume Loop) / F-V Loop (Flow-Volume Loop)

Safety

31 types of sound and visual alarm information, easier for users to do some error checking and troubleshooting.
Built-in oxygen concentration sensor, ensure stable precision of oxygen concentration.
Easy to move with four casters, easy to stop with two brakes.
Separate design of electronic circuit and gas flow rate keep safe running of ventilator.
Compact long life internal battery can provide emergency power, avoid risk of patient.
Self-check before operation, eliminate system mistake.