

NB350

Ventilator

Physical Specifications

Weight	main unit: ≤ 10 kg
	main unit and trolley: ≤ 40 kg
	main unit, trolley and air compressor: ≤ 65 kg

Dimensions (HxWxD)	354 mm $\times$ 315 mm $\times$ 255 mm (main unit)
	1365 mm $\times$ 526 mm $\times$ 544 mm (main unit and trolley)
	1365 mm $\times$ 505 mm $\times$ 660 mm (main unit, trolley and air compressor)

Display screen

Display Size	12.1 inch color active matrix TFT touch, capacitive
Display Resolution (H) $\times$ (V)	1280 $\times$ 800 pixels
Brightness	Adjustable
Ports	RS-232
	Ethernet
	USB port
	VGA connector
	Nurse call connector

Ventilation Specifications

Patient Type	neonate (including premature babies) and children weighing less than 30kg
Ventilation Mode	NCPAP (Nasal Continuous Positive Airway Pressure Ventilation)
	NIPPV (Nasal Intermittent Positive Pressure Ventilation)
	SNIPPV (Synchronized Nasal Intermittent Positive Pressure Ventilation)
	HFNC (High Flow Nasal Cannula)

Controlled Parameters

CPAP	1.0 – 15.0 cmH ₂ O
PEEP	1.0 – 15.0 cmH ₂ O
P _{insp}	2.0 – 20.0 cmH ₂ O
P _{wakeup}	2.0 – 20.0 cmH ₂ O
Flow	0.5 – 20.0 L/min
FiO ₂	21 – 100 vol. %
O ₂ Flush O ₂ %	22 – 100 vol. %
T _{insp}	0.10 – 15.0 s
f	1 – 120 /min
f _{backup}	1 – 120 /min
WakeupCycles	OFF, 1 – 5
I:E	4:1 – 1:10



Trigger	1 – 10
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Monitored Parameters

PEEP	–20.0 – 120.0 cmH ₂ O
P _{peak}	–20.0 – 120.0 cmH ₂ O
P _{mean}	–20.0 – 120.0 cmH ₂ O
Flow	0.0 – 40.0 L/min
FiO ₂	0 – 100 vol. %
f _{spn}	0 – 250 /min
T _{exp}	0.00 – 30.00 s
I:E	20:1 – 1:150
Leak%	0 – 100 %
SpO ₂ /FiO ₂	65 – 500
OSI	0 – 30 cmH ₂ O
RSS	0 – 20 cmH ₂ O

Alarm Settings

Paw	High	5.0 cmH ₂ O – 25.0 cmH ₂ O
	Low	0.5 cmH ₂ O – 23.0 cmH ₂ O

Inspired oxygen (FiO₂) Auto, FiO₂ exceeds the alarm limit for at least 30 s, internal alarm limit: min (set value+max (5 % or set value*10 %), 100 %)

Auto, FiO₂ lower than the alarm limit for at least 30 s, internal alarm limit: max (set value–max (5 % or set value*10 %), 18 %),

	Absolute FiO ₂ low limit: 18 %
Apnea alarm time	OFF, 1 – 60 s
Trend	
Type	Tabular, Graphic
Length	120 hours
Content	Monitoring and setting parameters

Log

Type	Alarm log, Operation log
Max number	10000

Ventilator Components

O₂ Sensor

Type	Galvanic fuel cell
Response time	< 23s

SpO₂ module

Displayed numeric	SpO ₂ , PR, PI
SpO ₂ measurement range	0 – 100 %
PR measurement range	20 – 300 1/min
PI measurement range	0.05% – 20%
Waveform	Pleth
SpO ₂ High alarm limits	2 – 100%
SpO ₂ Low alarm limits	0 – 98%
SpO ₂ Desat alarm limits	0% – 98%
PR High alarm limits	17 – 300 1/min
PR Low alarm limits	15 – 298 1/min

Air compressor

Input voltage	220 – 240 VAC
Frequency	50 Hz
Input current	3 A
Output pressure	300 kPa – 400 kPa
Noise	not more than 35dB (A) in normal condition
Constant flow	≥ 10L/min@ 300 kPa
Peak flow	100 L/min for more than 0.8s at one barometric pressure
Dewpoint depression	5°C below room temperature at 10L/min

Operation Data

Environmental specifications

Temperature	5 – 40 °C (operating) ; –20 – 60 °C (storage) *
Relative Humidity	10 – 95% (operating); 10 – 95% (storage)
Barometric Pressure	50 – 106 kPa (operating); 50 – 106 kPa (storage)

* Storage temperature for galvanic fuel cell: –20 – 50 °C (storage)

Gas supply

Gas type	O ₂ and Air
Pipe Connector	NIST or DISS
Gas supply pressure	280 kPa– 650 kPa

External AC power supply

Input voltage	100 – 240 VAC
Frequency	50/60 Hz
Input current	1.0 – 0.6 A

External DC power supply

Input voltage	12 – 24 VDC
Input current	8 – 4 A

Internal battery

Number of batteries	One
Battery type	Build-in Lithium-ion battery, 10.8 VDC, 5600 mAh for each
Battery run time	240 min (Powered by one new fully – charged battery in standard working condition)*

Special Functions and Procedures

Intelligent Oxygen Control (IOC)

Manual breath

O₂ Flush

Leak compensation

* The typical work condition is: Ventilation mode:

Gas supply: Medical air and oxygen supply with range 400±100kPa;

Ventilation mode: NCPAP; CPAP=3cmH₂O, FiO₂=21 vol.%.

Some of functions marked with an asterisk may not be available.

Please contact your local Mindray sales representative for the most current information.