Hitwin
HEALTHCARE

BMC

ResPro series Ventilator

Bi-level non-invasive ventilator with high flow function

	R 80B
Non-invasive mode	CPAP、S、S/T、T
Oxygen concentration setting	Off, 21%-100% settable
FiO2	21%~100% monitorable
IPAP(cmH2O)	4~30
EPAP(cmH2O)	4~25
Delay time	0 ～ 60 min
Ramp	1-6, 6 adjustable gears
Target tidal volume	100 ～ 2000 mL Off 0.3
Ti max	～3 s adjustable 0.1～3 s adjustable
Ti min	
Isens	1-8, 8 adjustable gears
Esens	1-8, 8 adjustable gears
Respiratory rate	3～60 times/min adjustable
Tubing temperature	Off, 18～30 ℃ adjustable
Max. treatment pressure of noninvasive mode	30

Hitwin Healthcare Pvt Ltd,.
#7/10. Jaganathan Nagar 2nd Main Road,
Arumbakkam, Chennai-600106,
India. Ph +91 44 4684 5555(20 Lines) 4233 3313,
www.hitwinhealthcare.com,
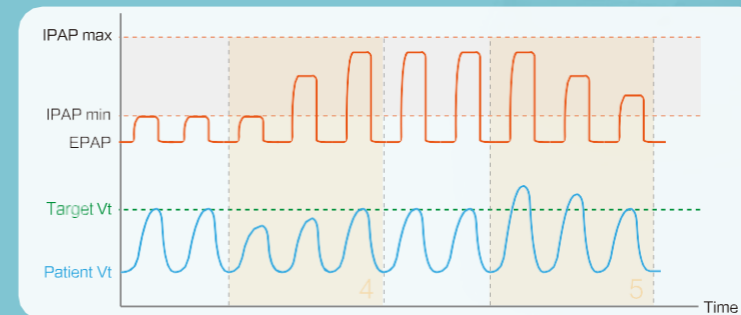Mobile : 9344166778 / 9381950006

The BMC ResPro series non-invasive Bi-level ventilator has been designed highly integrated with twin turbine motor, with its high flow and non-invasive mode, can meet the more needs of clinical treatment.

- The high flow mode provides a maximum of 80L / min of air/oxygen mixtures, the oxygen concentration setting automatically, and exclusive patented AutoFlow function and SmartFlow function.

- In Bi-level non-invasive mode, the max. IPAP can reach 30cmH$_2$O and target oxygen concentration can be set. The specifically design of disinfection-free, the backflow prevention valve on humidifier chamber to prevent gas backflow, make the maintenance much more convenient.

Hitwin
HEALTHCARE

BMC

Non-invasive mode

- 30 hPa high intensive therapy: provide pressure support of up to 30 hPa to meet the needs of high intensive therapy
- Controllable tubing temperature: can be set off, adjustable from 18 to 30°C
- Full-mode pressure titration: with all basic modes of non-invasive ventilator
- Respiratory rate: 3 ~ 60 times / min adjustable
- Respiration trigger sensitivity: up to 8 levels of breath trigger sensitivity, adjusted at any time as needed
- Target tidal volume function: Automatically controls the treatment intensity based on the patient's tidal volume changes, more intelligent

- Oxygen concentration: Non-invasive mode can set the target oxygen concentration of 21%~100%, eliminating the tedious operation of manual adjustment, and provides real-time monitoring of 21% ~ 100% oxygen concentration, real-time control of treatment parameters
- Rich tubing and oxygen absorption interface
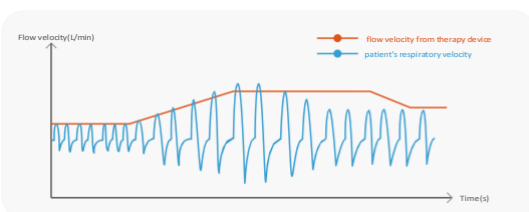
ResPro

High flow mode

Can set FiO$_2$, temperature and flow

- Control target oxygen concentration automatically, oxygen delivery in the machine, 21% -100%, accurate to 1%;
  Wall oxygen source, oxygen cylinder, oxygen generator can support it; The built-in ultrasonic oxygen sensor
  requires no maintenance.

- 9-stage humidification temperature: 29 ℃ -37 ℃, accurate to 1 ℃.

- Advanced dual fan design, two levels of HFlow and LFlow, 2 L / min ~ 80 L / min, can meet patients of most ages.

- Innovative 7-level humidity compensation function, providing ± 3 adjustable humidity compensation, easily coping
  with various harsh temperature and humidity environments

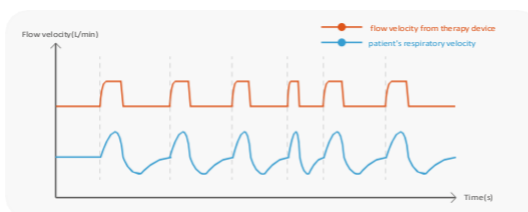### Innovative High Flow model

- AutoFlow

  Automatically set the output flow parameters based on
  the peak expiratory flow(PEF) of the patient,
  simplifying the setting steps, satisfying the treatment
  effect and improving patient comfort (With algorithm
  diagram)

- SmartFlow

  Follow the patient's every breath, switch the flow between
  breaths, provide a higher flow when inhaling, and a lower
  flow when exhaling, follow your every breath like a
  bi-level ventilator, comfortable and more economical
  oxygen resources. (With algorithm diagram)

Warm standby function designed for convenient use and saving oxygen

- ResPro has a Warm standby function, which allows you to continue warm oxygen therapy at any time without turning off the
  machine for a short time to leave, saving oxygen without having to wait for warm-up time.

More comprehensive monitoring indexs

- Real-time monitoring of Oxygen Concentration, Flow, Temperature, Respiratory Rate, sPEEP

Simple installation and easy setup

- Integration, disinfection-free design, saving clinical use and maintenance time.

ResPro series Bi-level ventilator provides non-invasive and high-flow dual mode, which can be used for patients with spontaneous breathing, including artificial airway respiratory insufficiency, also can be used for patients in hospitals and long-term care institutions.

- The Bi-level non-invasive mode has a target tidal volume and a maximum inspiratory pressure of up to 30 cmH$_2$O.

- High flow mode delivers a flow range 2 ~ 80 L / min, and the FiO$_2$ can also be set and adjusted automatically.

Optional accessories

| Water Chamber | Water Chamber Exchange Connector | Mask | Medical Trolley |

| LH2 Heated Tubing (use in high flow mode) | LH4 Heated Tubing (use in non-invasive mode) | Nasal Cannula for High Flow (XS/S/M/L) | |

| SpO$_2$ Kit | Disposable Pulse Oximeter Sensor | Finger Cuff Type Reusable Pulse Oximeter Sensor | Finger Clip Type Reusable Pulse Oximeter Sensor |

Recommended flow and range for high flow oxygen therapy

The following table lists the recommended starting flows and flow ranges for clinical studies on high flow oxygen therapy

Condition	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	Study
acute hypoxemic respiratory failure (pneumonia)									●							Macé et al. 2019
extubated patients at high risk of reintubation										●						Hernández et al Oct 2016
extubated patients at low risk of reintubation					●											Hernández et al Apr 2016
acute undifferentiated shortness of breath in the ED									●							Bell et al 2015
acute hypoxemic respiratory failure (pre-intubation)						——	——	——	●—	——						Frat et al 2015
hypoxemic patients post cardiothoracic surgery					——	——	——	●								Stéphan et al 2015
post extubation with acute respiratory failure									●							Maggiore et al 2014
do not intubate patient with hypoxemic respiratory distress					——	——	——	●—	——							Peters et al 2013
acute respiratory failure							——	——	●—	——						Sztrymf et al 2011
mild-to-moderate hypoxemic respiratory failure					●	●										Parke et al 2011
post-cardiac surgery					——	●—	——	——								Corley et al 2011
COPD			●													Storgaard et al 2018
COPD					●											Nagata et al. 2018
stable severe COPD patients											——	●				Cirio et al 2016
COPD and/or bronchiectasis			——	——												Rea et al 2010

Product parameters

	R-80B
Adjustment method of Oxygen concentration	Auto
Flow Monitorable	adjustable Monitorable
Flow range	2L~80L/min
Oxygen concentration adjustment range	21%~100%
★Temperature output range	29℃~37℃
★Temperature adjustment gear	9 steps adjustable
Disinfection-free conception	Yes
Screen size	3.5 inches
Trend review function	1 day; 3 days; 7 days
Oxygen concentration	adjustable,Monitorable
Temperature	Monitorable, adjustable
★sPEEP	Monitorable
★Respiratory rate	Monitorable
SpO₂	Option
Pulse rate	Option
Automatic reminder of filter replacement	Yes, settable
Automatic water filling function	Yes
★AutoFlow	/
★SmartFlow	/
★Humidity compensation	3~+3, 7 steps adjustable
★sPEEP set	/
★Warm standby	Yes
★Twin turbine motor	Yes

BMC

Hitwin
HEALTHCARE