



# Y-25T / Y-30T

(Target Tidal Volume Function)

BMC Y series BPAP Systems are Bi-level PAP (Bi-level Positive Airway Pressure) devices intended to provide non-invasive ventilation for patients with Obstructive Sleep Apnea (OSA) and Respiratory Insufficiency. They are intended for adult patients by prescription in the home or hospital/institutional environment. With its Target Tidal Volume function and other excellent comfort features and effective performance, it offers each patient personalized ventilation support.



# **Clinical Results**

Home non-invasive positive pressure ventilation could reduce emergency readmission rate and mortality of severe stable COPD.

Kohnlein Tm et al. Lancet Respir Med 2014 ; 2:698-705.

The 12-month risk of readmission or death was 63.4% in the home oxygen plus home NIV group vs 80.4% in the home oxygen alone group, absolute risk reduction of 17.0% (95% CI, 0.1%-34.0%).

JAMA 2017 Jun 6;317(21):2177-2186. Doi.

Main Expected Benefits for Patients of Home Non-invasive Ventilation in COPD: An International Survey of Indications and Practices from 15 Countries. (Order of importance)

- Hospital readmission reduction
- Gas exchange improvement
- Exercise tolerance
- Quality of life improvement
- Exacerbations reduction
- Servival improvement

### Dyspnea relief

- Sleep quality improvement
- FEV1 improvement

Domiciliary Non-invasive Ventilation in COPD: An International Survey of Indications and Practices.

COPD.2016 Aug;483-90 doi:10.3109/15412555.2015.1108960.Epub 2016 Jan 8.

# Comfortability

### Humidifier

- Eco Smart heating system with innovative dual water chambers design delivers accurate water quantity control with real time compensation, ensuring excellent humidifying capacity and improves comfort.
- Easy to take off and clean.
- Function to prevent overheating when water is out.





# Inspiratory / Expiratory sensitivity

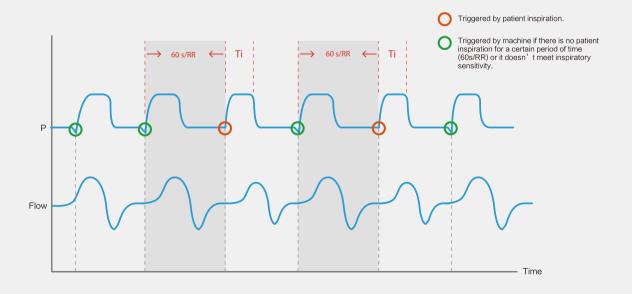
8 grades of I Sens and E Sens optimize the compliance of machine with the patient.



# Efficiencies in Therapy

### S/T Mode

Machine complies with patient breathing. However, if there is no inhalation for a certain period of time, the machine will give a forced ventilation to ensure the minimum ventilation.

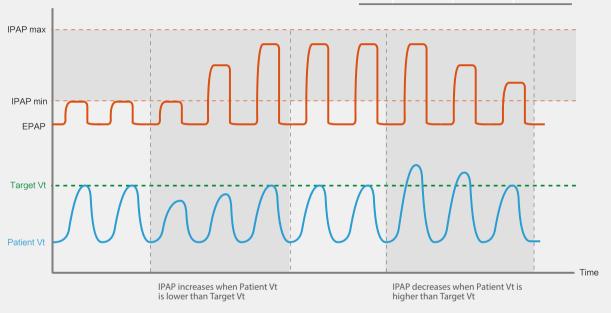


# **Target Tidal Volume Function**

Optimize IPAP according to mean Vt of last 5 breathings and prescribed Target Vt. Larger difference between mean Vt and target Vt takes more evident adjustment in IPAP.

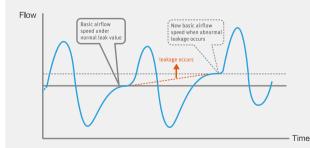
- Inspiratory pressure is between IPAP min and IPAP max.
- Larger difference between mean Vt and target Vt takes more evident adjustment in IPAP.
- Patient Vt is the mean of Vt values from patient's last 5 breathings.

Height (m)	Ideal Weight (kg) (BMI=20)	Target Vt (mL) (8 mL/kg)	Target Vt (mL) (10 mL/kg)
1.50	45	360	450
1.55	48	380	480
1.60	51	410	510
1.65	54	440	540
1.70	58	460	580
1.75	61	490	610
1.80	65	520	650
1.85	68	550	690
1.90	72	580	720



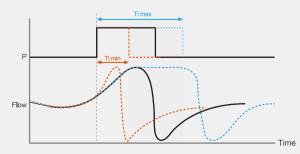
### **Auto Leak Compensation**

The machine detects the leaks during treatment in real time and adjusts the baseline to ensure correct triggering and related functions.



# Inspiratory time control

Tim min and Ti max could be set independently, avoiding insufficient ventilation due to short inspiratory time. At the meantime, cases can be prevented where expiratory sensitivity is unable to meet due to large leaks.



# **User Friendliness**

### **Data Management**

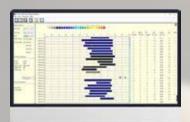








- Various way of therapy report review • Quick Report through Device Screen
- BMCares App
- BMCares Cloud Platform
- iCode web version (www.bmc-icode.com)
- RESmart nPAP Data Analysis Software (PC software)
- RESmart Software web version (www.icodeconnect.com/quick/info)





#### Alarms to make therapy reliable



Various visual and auditory alarming -Leak, High/Low RR, High/Low Pressure, Low Minute Ventilation, Low SpO<sub>2</sub>, Power Failure, etc.

#### 3.5-inch LCD screen

Real time display - Pressure (waveform), Flow (waveform), Vte, Respiratory Rate, Minute Ventilation, Leak, Inspiration Time.



#### 15 languages

English / Español / Português / Deutsch / 中文(简体) / Français / Polski / Italiana / Türk / Русский / Nederlands / Еλληνικά / 한국어 / Magyar / ไทย

#### Full therapy solution

- Trolley
- Battery for power back-up
- Respiratory humidifier to deliver optimal outcomes
- 15 or 22 mm tubing
- Heated tubing
- SpO<sub>2</sub> Kit
- · GPRS / Wi-Fi Kit
- 12/24 V DC/DC Converter

### Benefits of monitoring & supporting through cloud platform and patient self-management

A 12-month study in the United States in disease management such as strengthened education, follow-up in patients with chronic obstructive pulmonary disease, showed that:

Reduction in hospital admission and emergency visits for COPD, particularly for cases due to non-infectious factors.

Am J Respir Crit Care Med. 2010 Oct 1;182(7):890-6

Dewen and other studies have found that multi-dimensional integrated management in patients can effectively reduce the medical cost of COPD by about 11.7% per person.

COPD.2011 Jun;8(3):153-9

# Specifications

### **Model Comparison**

Y-25T	IPAP: 4 - 25 hPa EPAP: 4 - 25 hPa CPAP mode: 4 - 20 hPa	3.5-inch	CPAP, S, T, S∕T
Y-30T	IPAP: 4 - 30 hPa EPAP: 4 - 25 hPa CPAP mode: 4 - 20 hPa	3.5-inch	СРАР, S, T, S <i>/</i> T

#### **General Info**

Dimensions: 170 mm  $\times$  180 mm  $\times$  118 mm

290 mm  $\times$  180 mm  $\times$  134 mm (with the humidifier)

Weight: 1.5 kg

2.5 kg (with the humidifier)

Water capacity: 350 mL at recommendedwater level

### Ramp

The ramp time ranges from 0 to 60 minutes

#### Humidifier

Humidifier Settings: off, 1 to 5 (95°F to 167°F

/ 35°C to 75°C)

Humidifier Output: No less than 10 mg H2O/L

#### SpO:

Range: 0 to 100%

## **Pulse Rate**

Range: 40 to 240 BPM

#### **Sound Pressure Level**

< 30 dB, when the device is working at the

pressure of 10 hPa

#### Storage

SD card can record patient data and fault

information

### **AC Power Consumption**

100 - 240 V AC, 50/60 Hz, Max 2 A

### **Key Parameters**

Target Vt: On/ Off

150~1500 mL

Reslex: Patient, Off, 1~3

I Sens.: 1~8

E Sens.: 1~8

Res Rate: 3~40 BPM

Ti: 0.3-3.0s

Rise Time: 1~4

