



# COMEN

——— Share With The World ———

## NF5

# High Flow Heated Respiratory Humidifier

International Marketing Dept.  
Barry

# Contents

---

01 Clinical  
Knowledge

---

---

02 Product Introduction

---

---

03 Advanced  
Features

---

---

04 Competitor  
Analysis

---



Clinical Knowledge of HFNC

# What is HFNC

Provide a **certain flow, heated and humidified fresh gas** for treatment, and provide SpO2 monitoring. For patients with **spontaneous breathing**, these patients include patients with humidification therapy, oxygen therapy, tracheal intubation and tracheotomy.

## Syndrome

---

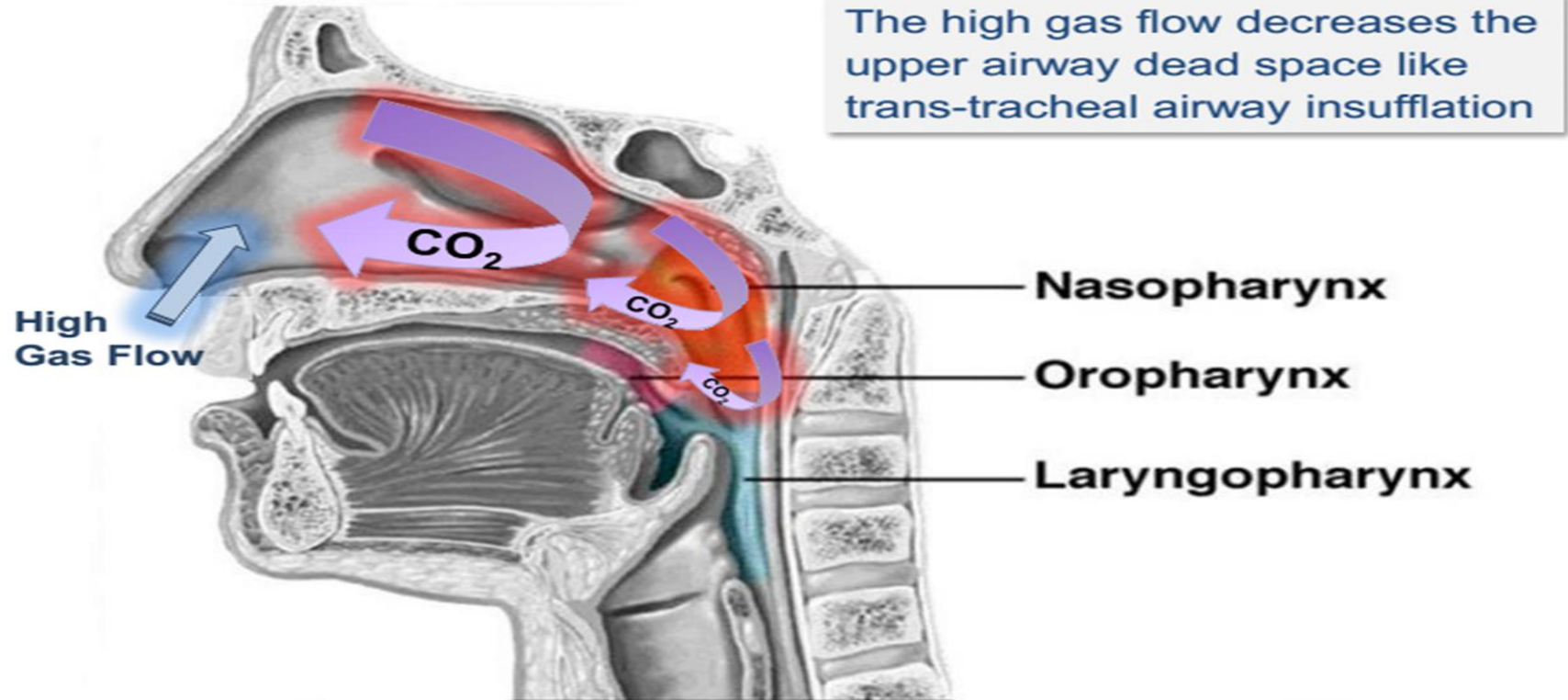
Memory respiratory failure (hypoxic)  
During tracheal intubation  
Post-extubation stage  
Emergency application

Palliative care  
Acute heart failure  
Auxiliary bronchoscopy  
Cardiothoracic surgery

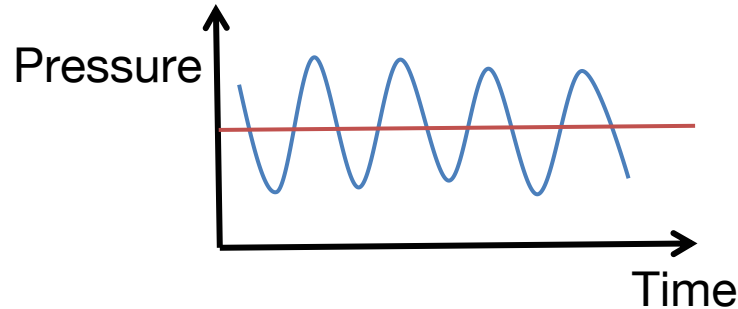


# Washout of nasopharyngeal dead space

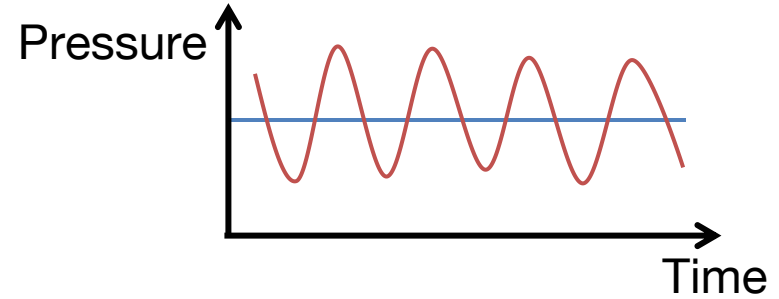
COMEN



# HFNC VS CPAP



HFNC



CPAP

— Flow  
— Pressure

HFNC generates variable airway pressure through a constant flow rate of fresh gas

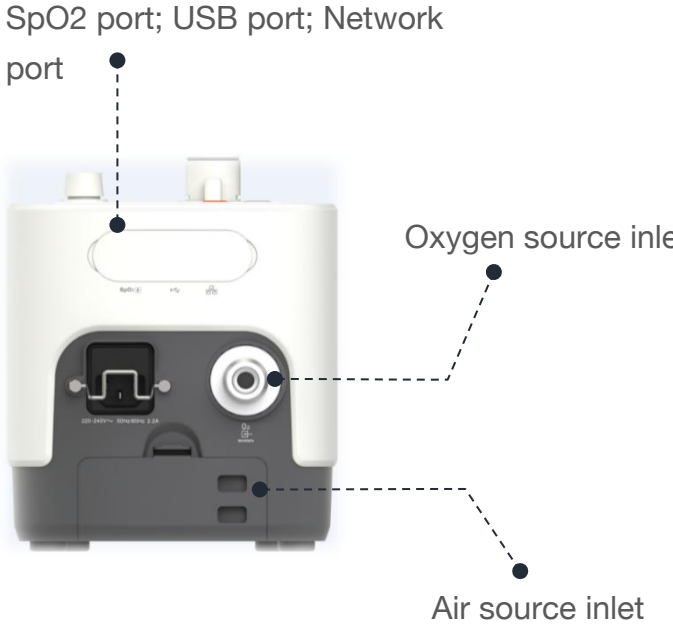
CPAP is to generate constant airway pressure by changing the flow rate of fresh gas



## Product introduction

# NF5 overview

COMeN





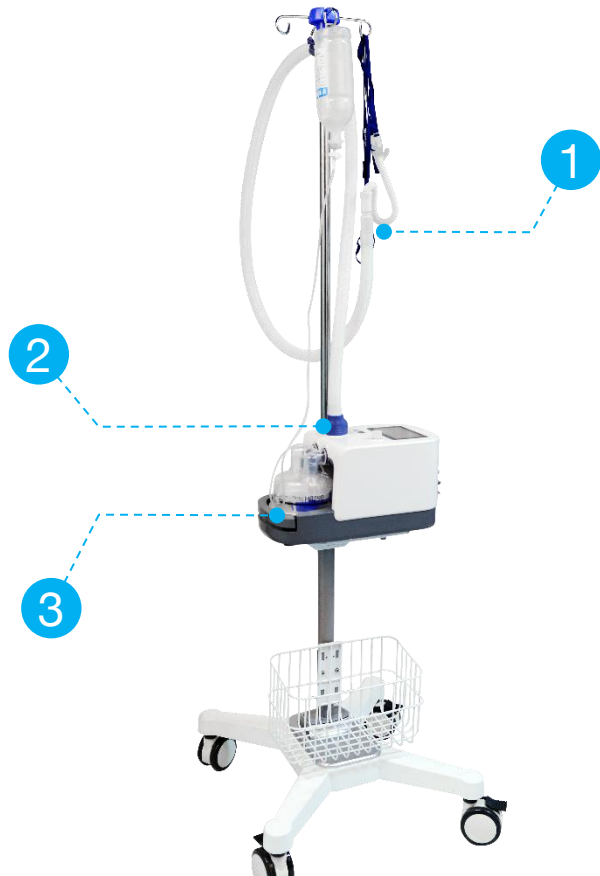
## Differences between NF series

Product Item	NF1	NF2	NF3	NF5
Air-oxygen mixer	mechanical	electronic	electronic	electronic
Temperature position	3	3	7	7
SpO2	optional	optional	optional	optional
Flush oxygen supply	X	√	√	√
Built-in battery	optional	optional	X	optional
Trolley	optional	optional	optional	optional



Advanced features

## Safety guarantee



### Multiple temperature monitoring

NF Series equipped with **three temperature sensors**, real-time temperature monitoring, synchronous closed-loop feedback, combined high temperature alarm, intelligent water level management and over-temperature protection functions to ensure safer heating

## More comfortable treatment



High-performance  
nasal cannula

Ergonomic design, **soft and comfortable**, no pressure,  
increase patient comfort,  
and patient tolerance



Ultra-quiet turbine

The use of **ultra-quiet turbine**  
greatly reduces noise, provides a  
quiet oxygen therapy environment,  
and helps patients reduce  
irritability

# Efficient oxygen supply



## Flush oxygen supply

Rapidly increase oxygen concentration, increase patient oxygen reserve, and facilitate nursing operations such as sputum suction, bronchoscopy, and intubation



## High-precision control of oxygen concentration

Adopt high-precision electronic air-oxygen mixing system and precise oxygen concentration monitoring module to realize precise regulation and real-time monitoring of oxygen concentration



31°C ~37°C

## Intelligent temperature and humidity control

Through intelligent temperature and humidity monitoring and closed-loop feedback mechanism, NF5 provides patients with accurate high-flow oxygen therapy close to the human core body temperature (37°C) and 100% relative humidity (44mg/L), making the mucus cilia cleaning function at its best



## SpO2 monitoring



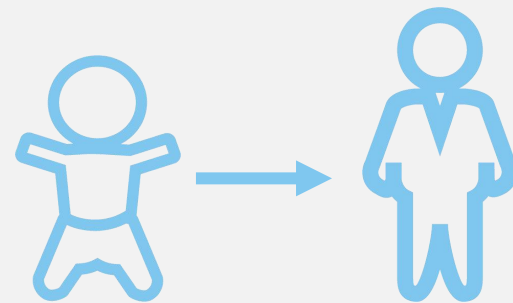
### SpO2 monitoring

- Optional: Comen, Masimo or Nellcor SpO2 module
- **Real-time** updates of the patient's blood oxygen concentration, easy to evaluate the therapeutic effect of HFNC, so that doctors can optimize the treatment plan in time

## Wide range of patient types

Suitable for treatment from  
infant to adult

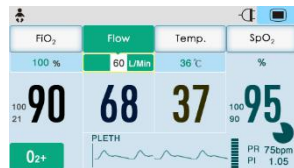
Wide range flow control of 2-80L/min, which can effectively flush out the physiological anatomical dead space, prevent carbon dioxide retention, meet the treatment requirements of infant to adult, and is suitable for clinical patients of different ages



Infant  
2~30L/min

Adult  
10~80L/min

## Easy of use



### Large touch screen

NF5 adopts a 4.3-inch touch screen, controlled by touch screen or round knob, easy and practical

### Electronic mixer

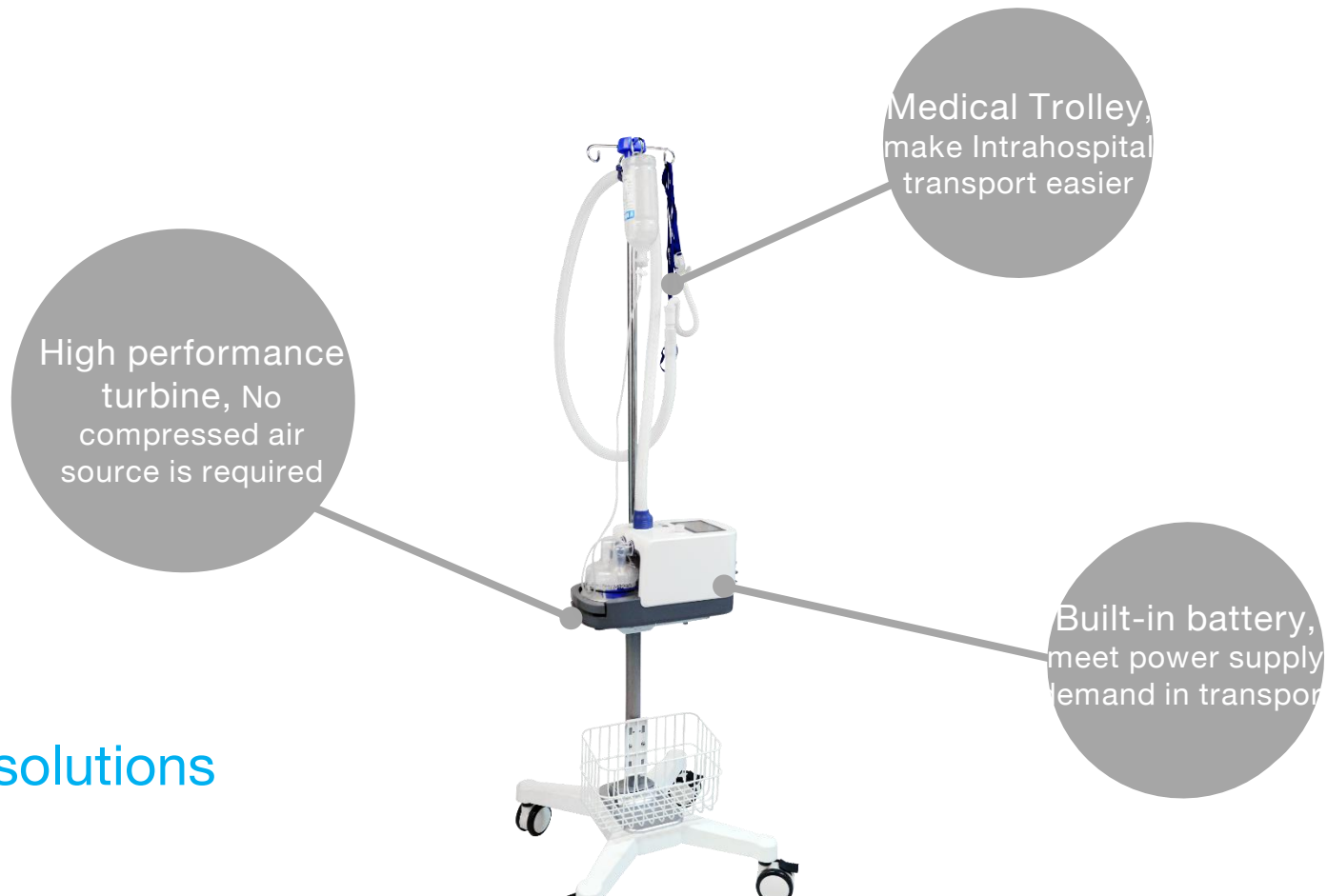
Flow and oxygen concentration setting more convenient, supplying fresh gas on demand

### Excellent design

The UI design is simple and intuitive, and the content is lucid, makes clear, able to quickly find what you need



# Intra-hospital transportation



Mobile solutions

Against COVID -19

# How can HFNC work for the nCOVID-19 mild cases?

“Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxemia or shock and target SpO<sub>2</sub> > 94%.”

--Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected Interim guidance, WHO



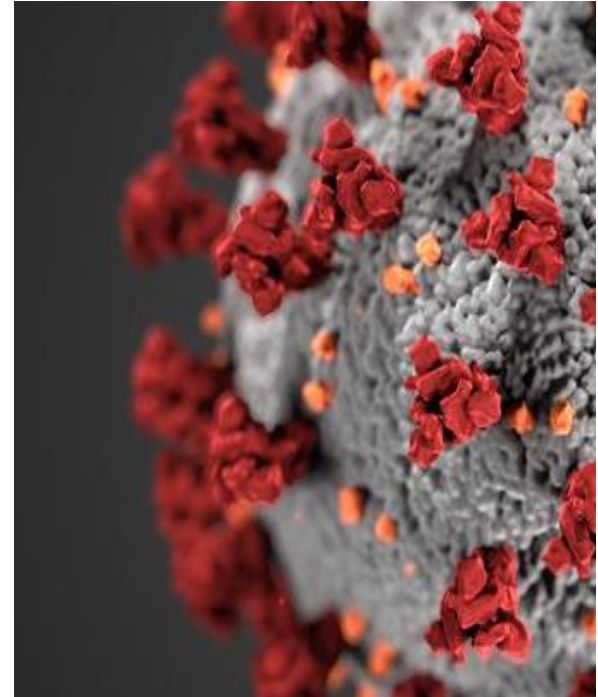
## Situation

Severe patients often have hypoxemia and respiratory distress. Notes for usage  
A correct respiratory treatment is necessary.

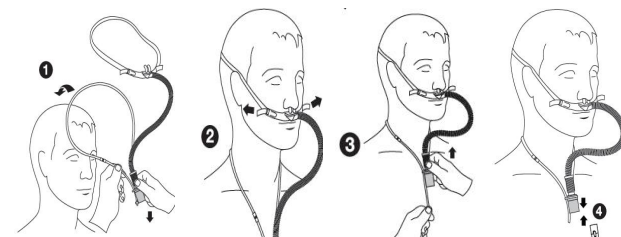


## Recommendation

High-flow nasal cannula (HFNC) therapy is highly recommended by Handbook of Covid-19 Prevention and Treatment.



# Accessories



N O	DESCRIPTION
i	Fisher&paykel/Water tank
ii	Fisher&paykel/Nasal Cannula
iii	Heated breathing circuit/ Fisher&paykel/With water tank



Competitor analysis





**COMeN**

**VS**



**VAPOTHERM**

Specification	NF5	Precision Flow (Heliox)
Picture		
Screen	4.3 inch touch screen	Backlit screen
Flow rate	2-80L/m	1-40L/m
Humidity Control	YES	NO
Data Export	USB	NO
Turbine	YES	NO
Temp Adjust Level	7	11
Unique Functions	SpO2, O2 Flush, Trend review, Auxiliary O2	Heliox Therapy, Hi-VNI Technology



NF5



Precision flow

#### Convenience

- NF5 has larger screen with touch function, providing numeric display and waveform display.
- Trend review supporting.



#### SpO2 monitoring

NF5 provide SpO2 function as optional for monitoring the SpO2 of patient, which will help doctor to optimize the treatment.



NF5

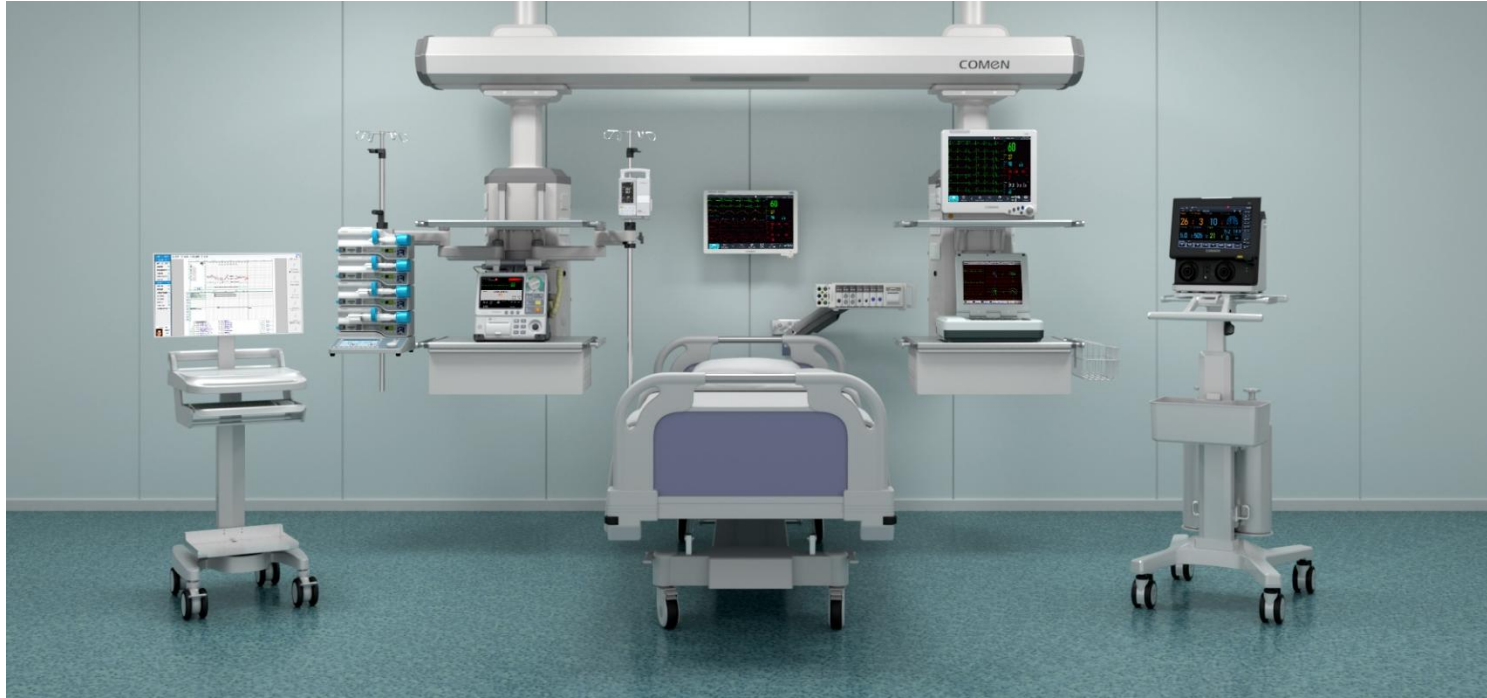
#### Intra-hospital transportation



Precision flow

- Turbine Design: no requirement of Air source
- Built-in battery: provide power supply
- Compact and portable trolley: platform of transportation





Solution



- Comprehensive Solution for Intensive Care Unit (ICU) .
- Able to provide a great range of products in ICU including Ventilator, Patient Monitor, Infusion and Syringe Pump, Pendant.

COMEN is the only 4 manufacturers in the world that can provide comprehensive ICU solution

COMEN

vs

Fisher & Paykel  
HEALTHCARE

Specification	NF5	Airvo 2™
Picture		
Screen size	4.3 inch touch screen	2"
Flow rate	2-80L/m	1-60L/m
Battery	30mins	×
Temp	31~37°C(7 levels adjustable)	31°C, 34°C, 37°C(3 levels)
Turbine	YES	NO
Accuracy of O2	± 3%	± 4%
SpO2	COMEN, MASIMO, NELLCOR	×
Trend	7 days (168h) graphical and tabular trend	×
Auxiliary O2 supply	√	×
Timer	√	×



### Convenience

- NF5 has larger screen with touch function, providing numeric display and waveform display.
- Trend review supporting.



### Unique function of NF5

- SpO2 monitoring integrated
- 7 days of graphical and tabular trend review
- Auxiliary O2 supply (30L/Min)
- O2 flush

...

### Intra-hospital transportation

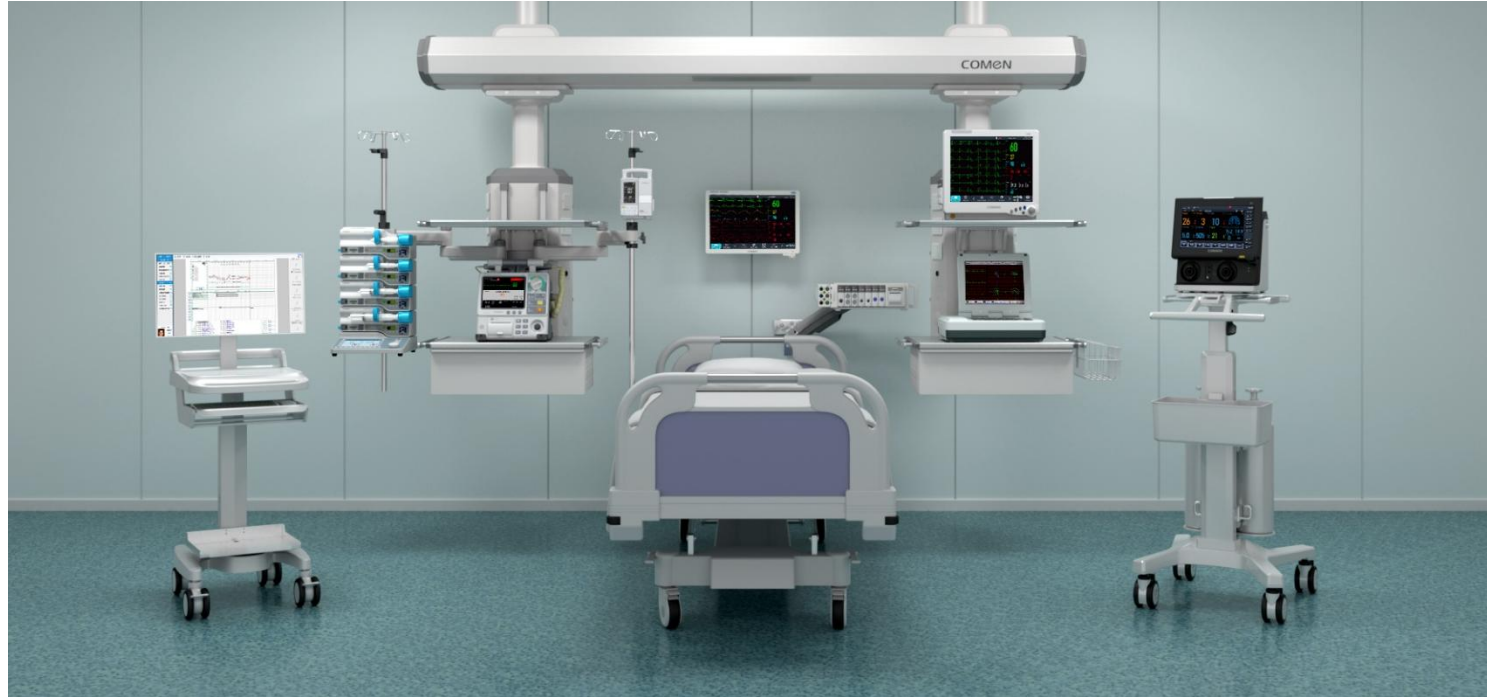


- Turbine Design: no requirement of Air source
- Built-in battery: provide power supply
- Compact and portable trolley: platform of transportation

COMEN

vs

Fisher & Paykel  
HEALTHCARE



#### Solution



- Comprehensive Solution for Intensive Care Unit (ICU) .
- Able to provide a great range of products in ICU including Ventilator, Patient Monitor, Infusion and Syringe Pump, Pendant.

COMEN is the only 4 manufacturers in the world that can provide comprehensive ICU solution

COMeN

vs



Specification	NF5	Vincent Medical O2FLO
Picture		
Screen size	4.3 inch touch screen	2.8"
Flow rate	2-80L/m	10-60L/m
Battery	30mins	Yes
Temp	31~37°C(7 levels adjustable)	31°C~ 37°C
O2 Concentration	21-100%, ± 3%	21-95%, ± 5%
SpO2 Monitoring	COMEN, MASIMO, NELLCOR	×
O2 Flush	√	×
Auxiliary O2 supply (30L/Min)	√	×
External O2 flowmeter	No need	Mechanically adjust the O2 flow rate



### Convenience

- NF5 has larger screen with touch function, providing numeric display and waveform display.
- Trend review supporting with waveform.

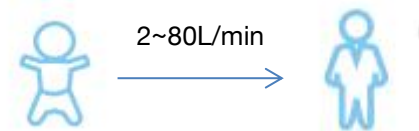


### Unique function of NF5

- SpO2 monitoring integrated
- Auxiliary O2 supply (30L/Min)
- O2 flush

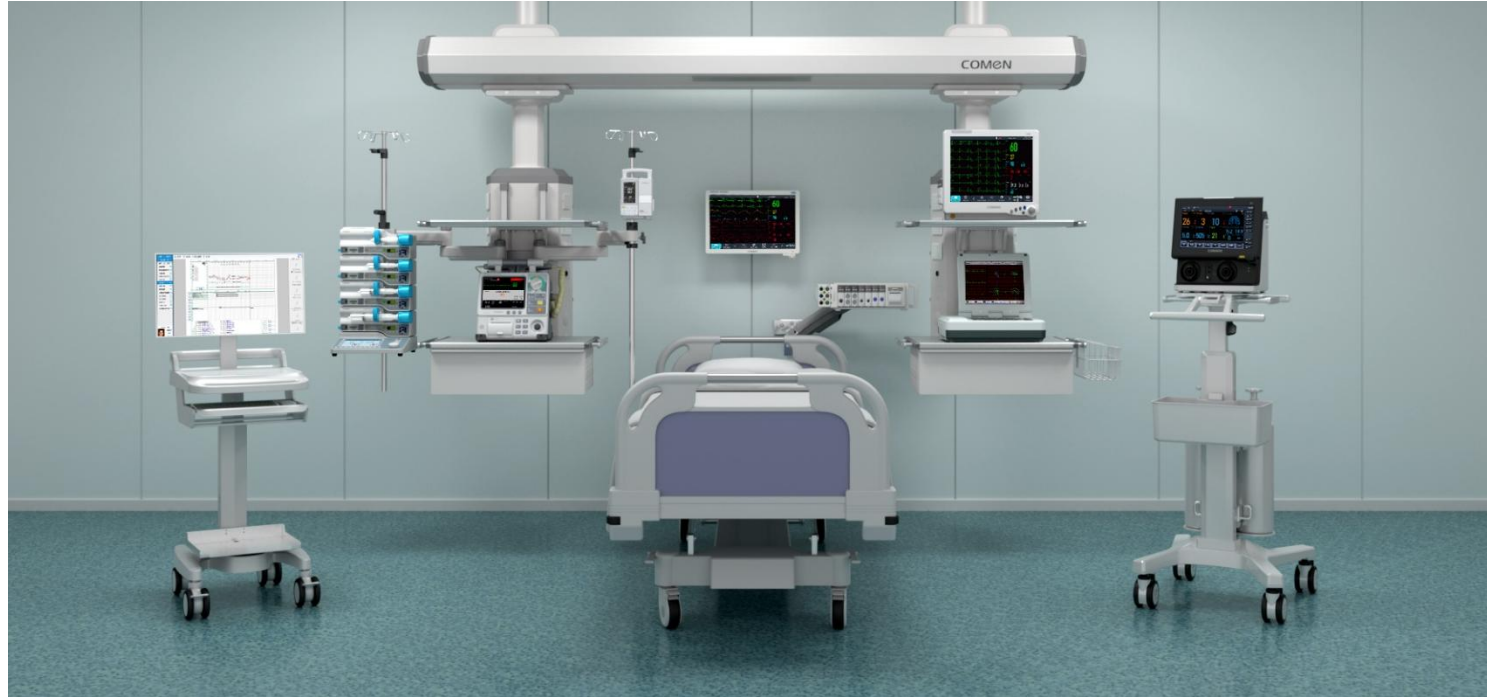
...

### Wide range of flow control



- NF5 provides 2~80L/min, which satisfies the requirement of O2 treatment from infant to adult
- According to the "Expert Consensus on the Application of Adult HFNC Clinical Norms" in China, the range of new requirement for O2 therapy is 8~80L/ml, which Vincent can't meet it



**Solution**



- Comprehensive Solution for Intensive Care Unit (ICU) .
- Able to provide a great range of products in ICU including Ventilator, Patient Monitor, Infusion and Syringe Pump, Pendant

COMEN is the only 4 manufacturers in the world that can provide comprehensive ICU solution

COMEN

vs

*yuwell* 鱼跃

Specification	NF5	HF-75A
Picture		
Screen size	4.3 inch touch screen	7 inch touch screen
Flow rate	2-80L/mim	2-75L/mim
Battery	30mins	--
Temp	31~37°C(7 levels adjustable)	31~37°C
Turbine	YES	YES
Accuracy of O2	± 3%	--
SpO2	COMEN, MASIMO, NELLCOR	--
Trend	7 days (168h) graphical and tabular trend	--
Auxiliary O2 supply	√	--
Timer	√	--



#### Unique function of NF5

- SpO2 monitoring integrated
- Auxiliary O2 supply (30L/Min)
- O2 flush
- ...



#### Intra-hospital transportation

- Turbine Design: no requirement of Air source
- Built-in battery: provide power supply
- Compact and portable trolley: platform of transportation



Solution

- Comprehensive Solution for Intensive Care Unit (ICU) .
- Able to provide a great range of products in ICU including Ventilator, Patient Monitor, Infusion and Syringe Pump, Pendant.

COMEN is the only 4 manufacturers in the world that can provide comprehensive ICU solution