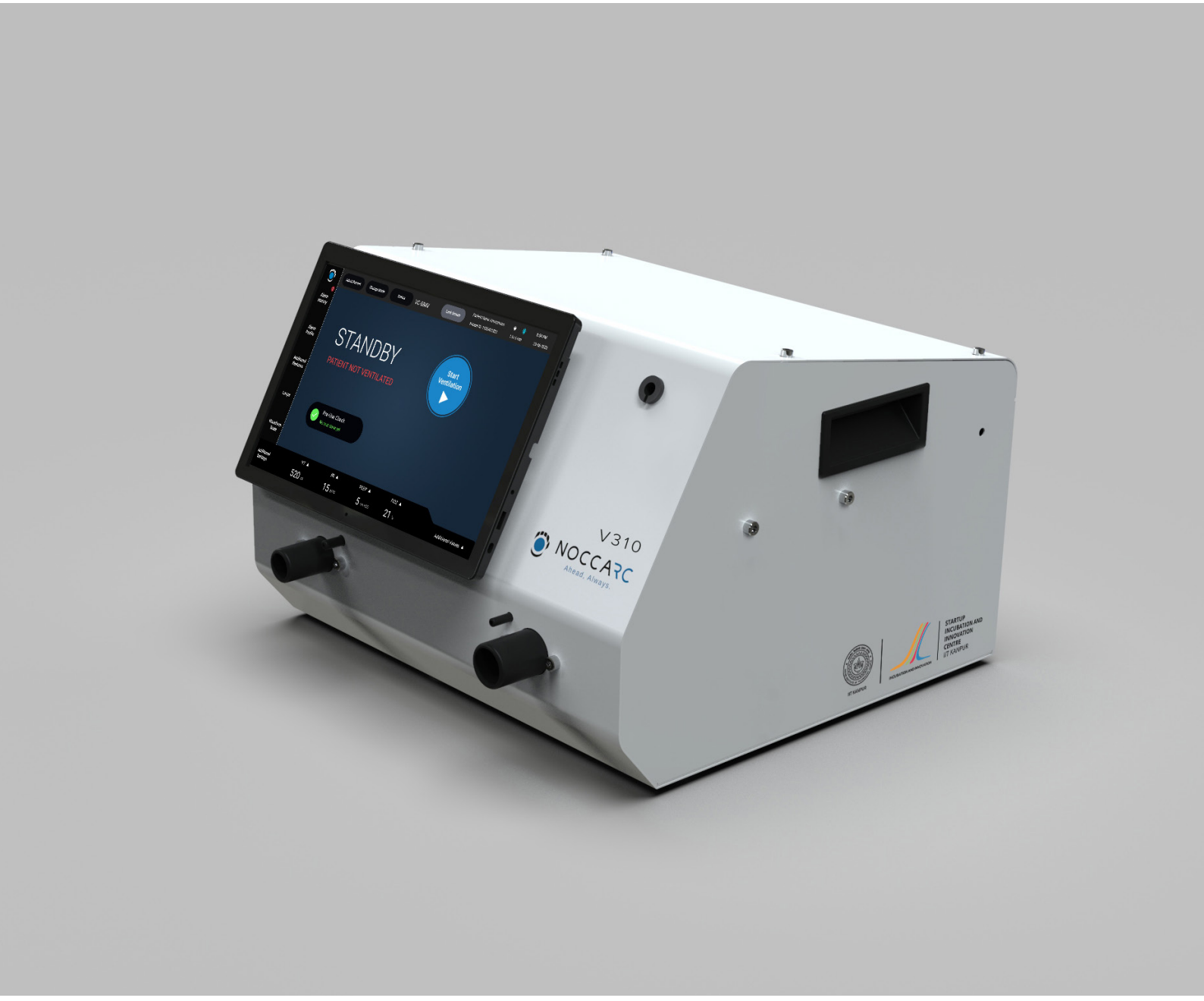
NOCCARC

Ahead, Always.



NOCCARC V310

VENTILATOR

With

Integrated

HFNC

Innovative
Reliable
Indigenous
Safe.

Noccarc V310 offers an advanced, compact yet reliable ICU ventilation solution. Carefully crafted with the combination of cutting edge research and advanced manufacturing technologies, the turbine based design enables highly efficient independent operation and a wide range of ventilation modes, including High Flow Nasal Cannula.

The IOT enabled system allows central data monitoring and logging remotely making **Noccarc V310** a much safer and easy to manage option for the health professionals in the current case of Covid-19 pandemic.

Modes of Ventilation

Invasive and Non Invasive :

PC-CMV, PC-AC, PC-SIMV, VC-CMV, VC-AC, VC-SIMV,
PRVC-CMV, PRVC-AC, PRVC-SIMV, PS/CPAP (PSV), APRV

High Flow Nasal Cannula (HFNC mode)

Quick Ventilation Mode for Emergency Use

Apnea Backup Ventilation

Technical Specifications

Peak Pressure	60 cm H_2O
Peak Respiratory Rate	Upto 80 BPM
Inspiratory Time	0.2 - 5s
Tidal Volume	50 - 2000 ml
Peak Flow Rate	280 SLPM (Internally restricted to 160 SLPM)
PEEP	0 - 40 cm H_2O (Increments of 1 cm H_2O)
Pressure Support	0 - 50 cm H_2O
Inspiratory Hold	✓
Expiratory Hold	✓
I:E Ratio	1:6 to 6:1
Trigger Flow Sensitivity	1 SLPM - 20 SLPM
Volume Accuracy	2-3 % of the full scale between 10 LPM - 80 LPM
Leak Detection and Compensation	✓
Quick Ventilation Mode for Emergency Use	✓
Programmable SIGH	✓
Electronic FiO_2 Manipulation	✓
FiO_2 Manipulation between 21% to 100%	✓
FiO_2 Delivery Independent of Flowrate, PEEP and Minute Volume	✓
Dimensions	395 X 340 X 255 mm
Weight	10.1 Kg
Oxygen Input Pressure	45 - 60 PSIG
Battery Type	Lithium Ion

Certifications : IEC60601-1 Compliant

(Tested at NABL accredited laboratory)

Monitored Parameters

- Peak Inspiratory Pressure (PIP)
- Peak End Expiratory Pressure (Auto PEEP)
- Plateau Pressure
- Inhaled and Exhaled Tidal Volume
- Oxygen Concentration (FiO_2 %)
- Respiratory Rate
- I: E ratio
- Driving Pressure
- Mean Pressure
- Exhaled and Inhaled Minute Volume
- Spontaneous Minute Volume
- Total Leak Volume
- Rapid Shallow Breathing Index (RSBI)
- Static and Dynamic Lung Compliance
- Inspiratory and Expiratory Time
- Display trend values for 48 Hrs for all the above parameters

Graphic Mode with Display

Flow vs Time

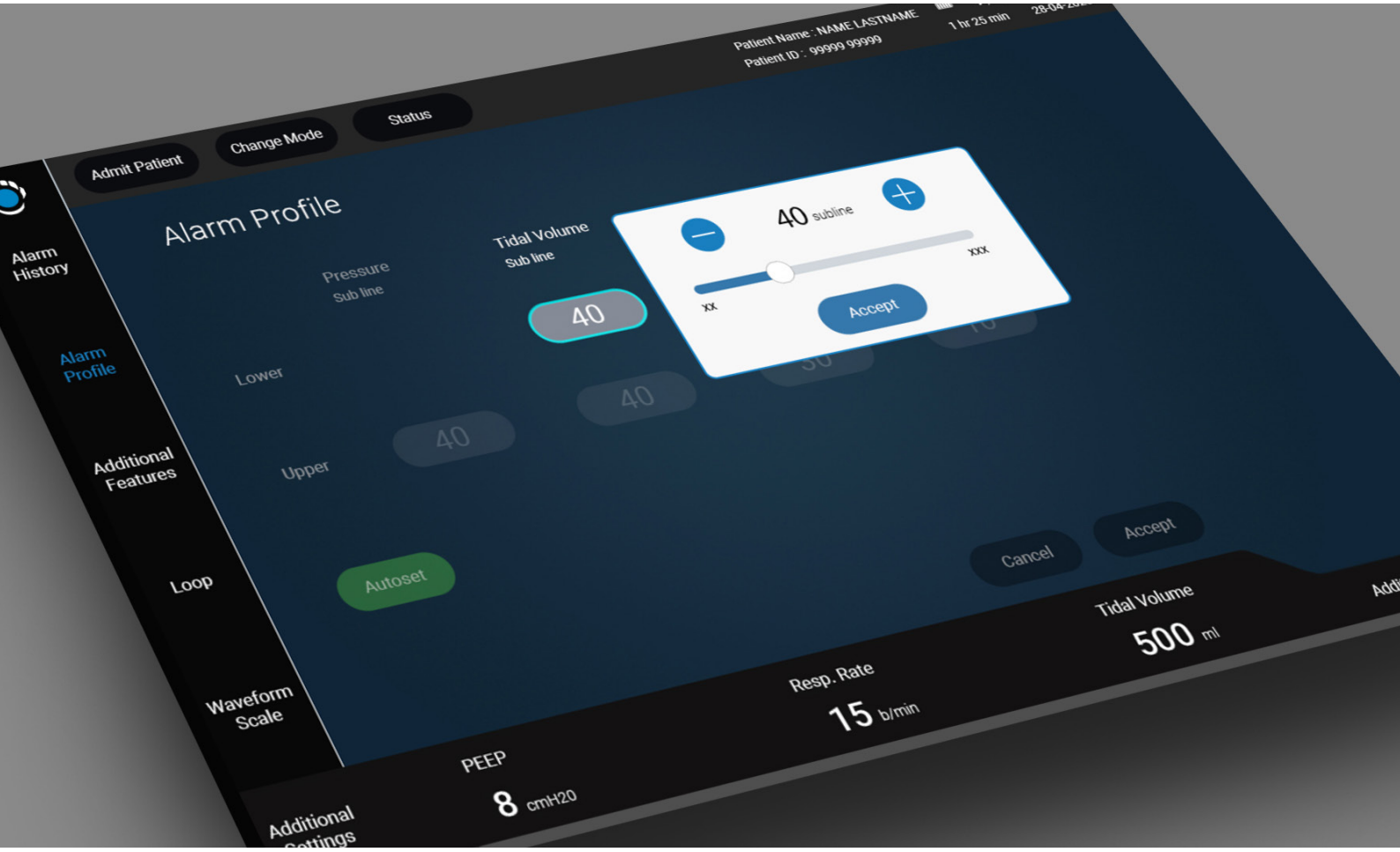
Pressure vs Time

Volume vs Time

Pressure-Flow Loop

Pressure-Volume Loop

Volume-Flow Loop



Alarms for Device and Patient Safety

- Power Disconnected
- Patient Disconnected
- High Inspiratory Pressure
- High & Low PEEP
- High & Low Respiratory Rate
- High & Low Tidal Volume
- High & Low FiO_2 %
- Power Sensor Failure
- Read/Write Error
- Ventilator Temperature Error
- System Failure (Safe Mode)
- Alarm History of 200 Alarms

Unique Features

10 inch Touchscreen with User-Friendly UI

The integrated 10 inch Touchscreen Interface provides great monitoring and controlling capabilities. The proprietary UI is designed in accordance with inputs from medical professionals and has been designed for quick and easy usage, with provisions for all types of scenarios.

High Flow Nasal Cannula (HFNC) Mode

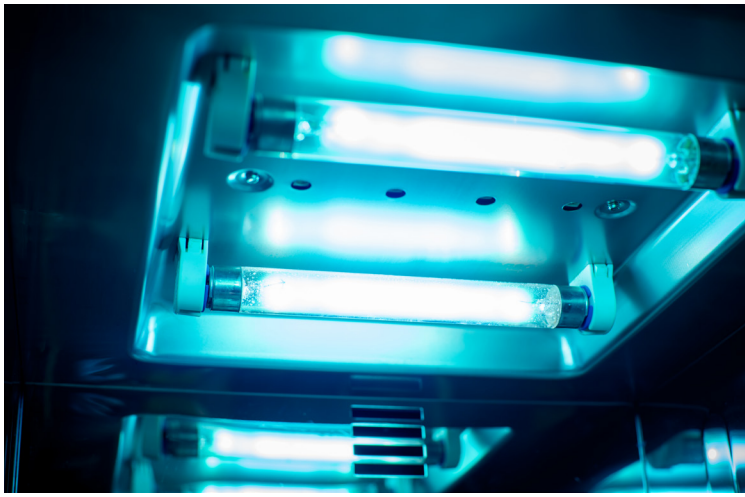
Noccarc V310 HFNC mode when used with humidifier, is capable of delivering up to 100% humidified and heated oxygen at a flow rate of up to 100 LPM. High flow therapy increases alveoli recruitment and delivers high FiO_2, while offering increased patient comfort.

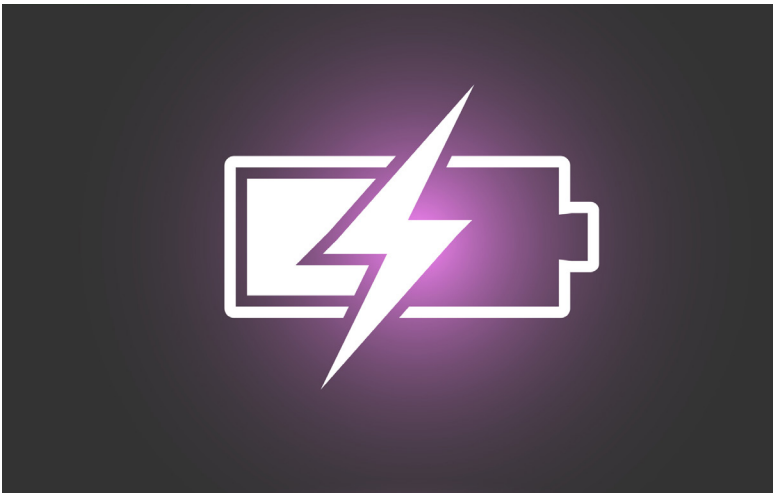
Inbuilt Programmable Nebulizer Synced with Inspiratory Phase

Inbuilt programmable nebulizer provides quick and convenient way to administer medication to ventilated patients. The inspiratory phase synchronization algorithm reduces medication loss during expiration, and precisely delivers set tidal volume.

UVC Decontamination Chamber

The UVC decontamination chamber mitigates the risk of airbourne transmission of diseases by reducing the bacterial and viral load going into the ICU atmosphere from patient exhaled air.





Battery Backup upto 8 Hours

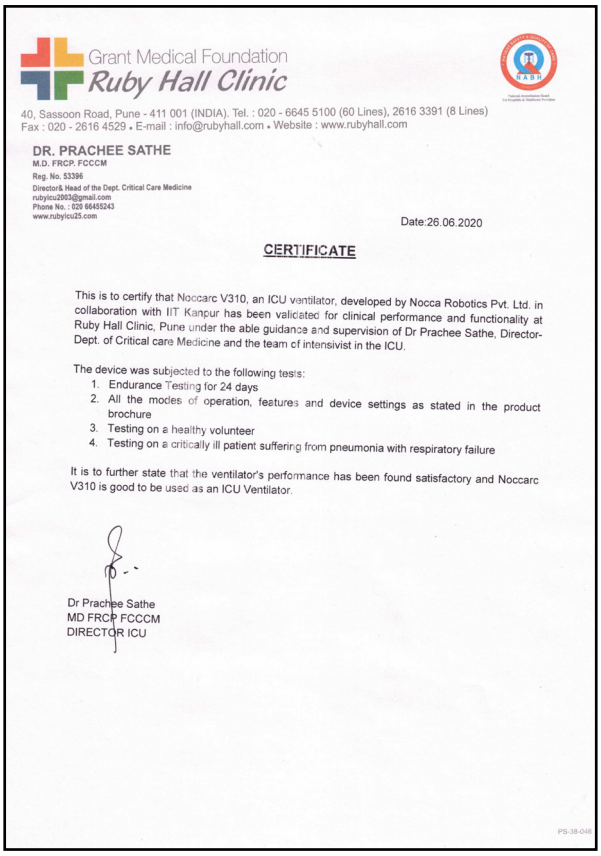
Noccarc V310 is a powerful turbine based ventilator with a battery backup of upto 8 hours. Its compact, independent and power efficient design makes it an ideal ICU as well as transport ventilator.

IoT Enabled Central Data Monitoring and Logging*

Central monitoring system incorporates innovative features such as flexible trending and display capabilities, advanced alarm management and cloud data logging. Combined with a user friendly web interface with seamless networking system via wireless LAN, Noccarc V310 offers safe and manageable control for healthcare professionals.

* Central monitoring system is not included with the ventilator and has to be ordered separately.

Testimonials



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Date:26.06.2020

CERTIFICATE

This is to certify that Noccarc V310, an ICU ventilator, developed by Nocca Robotics Pvt. Ltd. in collaboration with IIT Kanpur has been validated for clinical performance and functionality at Ruby Hall Clinic, Pune under the able guidance and supervision of Dr Prachee Sathe, Director-Dept. of Critical care Medicine and the team of intensivist in the ICU.

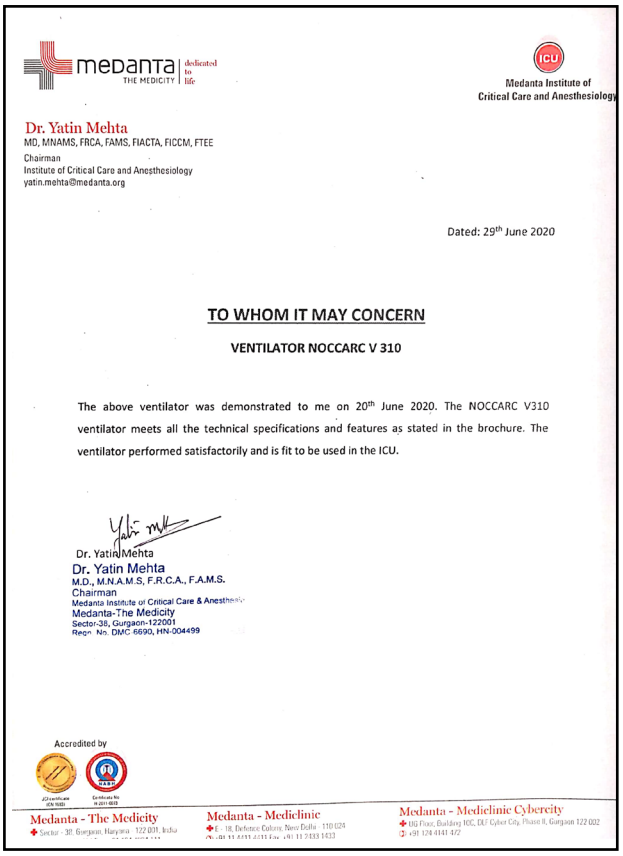
The device was subjected to the following tests:

1. Endurance Testing for 24 days
2. All the modes of operation, features and device settings as stated in the product brochure
3. Testing on a healthy volunteer
4. Testing on a critically ill patient suffering from pneumonia with respiratory failure

It is to further state that the ventilator's performance has been found satisfactory and Noccarc V310 is good to be used as an ICU Ventilator.

Dr Prachee Sathe
MD FRCP FCCCM
DIRECTOR ICU

PS-38-046



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Medanta Institute of Critical Care and Anesthesiology

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Chairman
Institute of Critical Care and Anesthesiology
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Dated: 29th June 2020

TO WHOM IT MAY CONCERN

VENTILATOR NOCCARC V 310

The above ventilator was demonstrated to me on 20th June 2020. The NOCCARC V310 ventilator meets all the technical specifications and features as stated in the brochure. The ventilator performed satisfactorily and is fit to be used in the ICU.

Dr. Yatin Mehta
Dr. Yatin Mehta
M.D., M.N.A.M.S, F.R.C.A., F.A.M.S.
Chairman
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Designed and Developed by

NOCCARC
Ahead, Always.

Technology Partner

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