



# AgVa

# PRO

UNIVERSAL ICU VENTILATOR



Every once in a while, a new technology, an old problem,  
and a big idea turn into an innovation.

-Dean Kamen



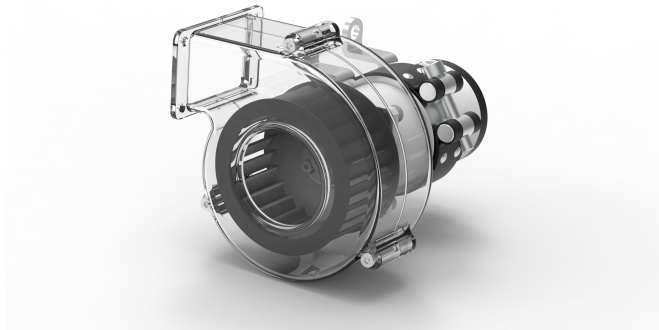
## PRO VENTILATOR FOR PRO USERS

AgVa Pro is an epitome of technology and efficacy in modern mechanical ventilation. It packs features never seen before in a ventilator. AgVa Pro has been developed grounds up along with the top doctors, hospitals and healthcare professionals. The ventilator packs technologies that ensures smooth and seamless operation. The advanced technologies reduces human intervention and ensures enhanced patient safety. All of this while being extremely cost effective to run.



## Exceptional Clarity with 24 Inch Display

The largest 24-inch display in the category puts all the information at your fingertips, while ensuring that everything is visible from a distance. With this display, every graph and loop is simply so much more informative. Additionally, thanks to our advanced multi-touch display, you can interact with the touchscreen effortlessly using both taps and gestures.



## Reliable Operation 365 Days

AgVa Pro has been designed to endure some of the most challenging situations. The blower for example is guaranteed for 40,000 hours. While the Expiratory flow sensor has a self-cleaning mechanism which automatically cleans the flow sensor every few breath cycles. It has a side stream blower cooling technology that ensures reliable operation in high altitude and temperatures.



## IOT Enabled Healthcare

AgVa Pro has been designed for the future. With inbuilt 4G connectivity it connects to the internet through mobile networks. This lets you monitor the patient remotely. With a specially designed nurse station you can connect to your devices without hassle of any wires.

# MODE FOR EVERY NEEDS

AgVa Pro includes every mode that you may ever need. Without any fuss in naming terminology, we have ensured everything is simple and does what it says. With 15 modes you always have a correct mode for the need.

PC-CMV | PC-AC | PC-SIMV/PS | PC-PSV

VC-CMV | VC-AC | VC-SIMV/PS

CPAP/PS | BPAP | HFNC | AI-VENT

n-CPAP/PS | NIPPV | NC-IPPV | n-HFNC



## EASY TO USE

### Quick Action Buttons

Time is valuable, and we know it. Therefore, to expedite and simplify. We have many quick action buttons. With only a click of a button, they provide access to some of the ventilator's frequently used features. This ensures simple operation and rapid reaction to multiple times procedures.

### Legacy UI Design

The UI has been designed in a way that it is informative yet simple to use. Large fonts and gradient type facing ensures that focus during critical situation. We have achieved all this while maintaining the conventional design surfaces. So the doctors can use the ventilator without any additional training.

### Graphical Tool Tip

Our unique graphical tooltip gives a pictorial representation to changes in ventilation parameters and how it would change the scalar patterns. It has separate tool for flow and pressure and can seamlessly display changes done and its end effect to the ventilation delivered even before you apply and changes to the ventilation settings.





# MOST ADVANCED NEONATE VENTILATOR

## Digital Proximal Sensor

The neonate sensor used in our ventilator is years ahead of the competition. With advanced proximal with world's first CMOS technology can sense even the minutest flow. With an integrated heating element, it ensures exceptional accuracy even in high humidity situations. The sensor has been packed with technology while having a dead-space of a less than 1 ml which ensures minimal rebreathing.

## Volume Modes

The super efficient and low inertia turbine helps achieving phenomenal reaction times clubbed with a high accuracy flow sensor enables us to deliver the exact tidal volumes that are required for neonate. Hence, it's no surprise that we are one of the only turbine ventilators to provide volume modes in Neonate category.

## Exceptional Flow and Volume Accuracy

The algorithm with low latency and gigahertz processing ensures extremely fast and accurate measurements. Along with state of art sensors enables us to sense flow as low as 0.02 LPM while providing a volume sensing accuracy of 0.1ml. These figures are unparalleled and never seen before in any neonate ventilator.

# SUPERIOR PATIENT SAFETY

## V-TAS (Volume Targeted Augmentation System)

With V-TAS™ now ensure accurate volume delivery even in pressure modes. When enabled the ventilator titrates the pressure above the set pressure level if required to ensure the delivery of set volume. This technology with a unique colour indicates the user whenever the V-TAS takes over the control and also provides an alarm when the target volume is not achieved.

## Smart FiO2

With generic Nellcor compatible SpO2 probe the ventilator measures the vitals of the patient and the doctors can set their target SpO2 and PR Range for the patients. The Smart FiO2 algorithm ensures the titration of FiO2 to ensure that the targets are achieved. This ensures patient safety at all times while reducing the chances of over oxygenation. Thus overall increasing the patient safety and reducing weaning off times.

## Large Alarm LED

In an intensive care unit, reaction time is crucial. Therefore, we ensure that an emergency is indicated with the highest priority by using the largest alarm indication in the industry. There are no warnings that go unnoticed thanks to the substantial and vibrant multi-colour LED bar. With a multi-colour indication, medical workers can identify the extent of the situation and respond accordingly from a good distance.

# V-TAS





## DESIGNED FOR ETERNITY

The entire construction of the ventilator surface is made up of high-grade aluminium. This makes it rust proof and easy to maintain. It gives the outer body a service life of over 20 years while still looking brand new.

In the day and age of cheap parts and planned obsolescence. AgVa Pro uses the highest quality materials that either don't need replacement or have a phenomenally long service life. Hence, making it a flag bearer of high quality that is designed to last forever.

# CUTTING EDGE TECHNOLOGY

## IOT Based Servicing

With the help of inbuilt 4G module, the ventilator ensures that the software is always up to date. Faults are diagnosed even before they may occur. In a rare case of any fault remote diagnosis ensures faster resolution. Not only this presumptive service is planned based on the usage. This ensures highest uptime and lowest TAT for any user queries.

## Self Cleaning Expiratory Flow Sensor

Expiratory Flow sensor is always a concern for doctors since it requires frequent replacement and calibration due to it being exposed to patient's fluids. Hence, we have designed a unique self-cleaning mechanism for the expiratory flow sensor that cleans the sensor every few cycles ensuring reliable reading in every breath.

## Side Stream Turbine Cooling

Turbines are prone to heating and losing critical performance in prolonged operation and high temperatures. But not in our case. We have designed the ventilator blower with a unique side stream technology that does not interfere with the inspiratory flow for any cooling needs. A separate airway with its own filter is provided to cool the blower ensuring reliable and long life operation while not interfering with inspiratory air temperature.

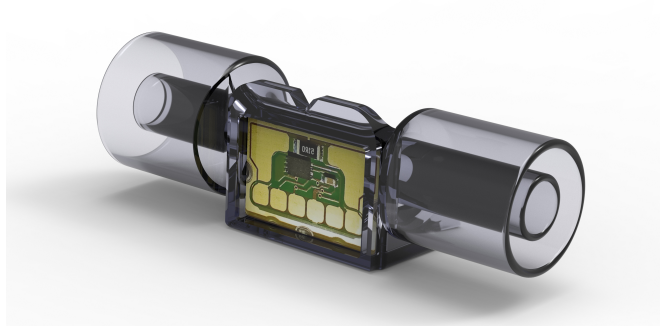


# LOWEST RUNNING COST



## Lifetime O2 Sensor

Oxygen sensors are expensive, while having a low life and requiring frequent replacement. Hence, in our ventilator, we use a unique oxygen sensor that provides 40% better accuracy than a traditional oxygen sensor. Which does not require a replacement ever. Thanks to this, you don't need to calibrate the oxygen sensor as well.



## Reusable Neonate Sensor

The neonate sensor used in our ventilator can be reused over 100 times by simple disinfection. This makes the cost of operation way lower than a traditional differential based sensor. All of this, while being leaps ahead of the traditional flow sensor in terms of accuracy.



## Rugged Expiratory Valve and Flow Sensor

The expiratory unit for our ventilator has been completely redesigned to provide long life while being highly cost effective to run. Both the flow sensor and the valve is disposable and are a fraction of cost of a traditional flow sensor and valve.



## AgVa ASSURE

AgVa has built its reputation over the years. You can be assured that the device being used has been made without cutting any corners. With one of the largest R&D team and the most extensive service network you would never have to worry about the post sales support. Whether now or decades later you can be assured that AgVa always has your back.

## SAFETY AT CORE

Each and every component used in our products have been selected very carefully. Ensuring that everything used is of medical grade and from world renowned manufacturing. With an extensive quality team, you can be assured about the quality of the devices. Thanks to this meticulous thinking that all our products are tested to highest global safety standard. All our products have been designed in conformity to ISO 13485, IEC 60601-1, IEC 60601-2 & ISO 80601-2-12



# TECHNICAL SPECIFICATIONS

Description	Specification
Patient Group	Adult   Paediatric   Neonatal
Ventilation Modes	PC-CMV   PC-SIMV   PSV   PC-AC VC-SIMV (PS)   VC-CMV   VC-AC   AI-VENT CPAP/PS   PC-BPAP   HFNC nCPAP   nBPAP   nHFNC
Dimensions	152 x 46 x 42 cms
Weight	45 kg
V-TAS	Available in all Pressure Controlled Modes
Smart FiO2	Available in all Adult & Paediatric
Battery Backup	Upto 3 Hours
Screen	24 inch Multi-touch full colour display
Monitoring	Standard : SpO <sub>2</sub>   Heart Rate
Turbine Life	40,000 Hours
Filtration	H13 HEPA Filter



Functions	Adult	Pediatric	Neonatal
Tidal Volume	200 to 2000 ml	50 to 500 ml	2 to 100 ml
Respiratory Rate	2 to 60	2 to 60	12 to 100
Trigger Flow	1 to 20 LPM	1 to 20 LPM	0.1 to 5 LPM
Pressure Support	0 to 40 cmH2O	0 to 40 cmH2O	3 to 35 cmH2O
Inspiratory Pressure	1 to 60 cmH2O	1 to 60 cmH2O	3 to 40 cmH2O
PEEP	0 to 30 cmH2O	0 to 30 cmH2O	0 to 20 cmH2O
Inspiratory Time	0.3 to 3.5 sec	0.3 to 3.5 sec	0.1 to 1.5 sec
Vt Apnea	200 to 2000 ml	50 to 500 ml	2 to 100 ml
RR Apnea	2 to 60	2 to 60	12 to 100
Time Apnea	20 to 60 sec	20 to 60 sec	20 to 60 sec
Trigger Exp	5 - 75%	5 - 75%	5 - 75%

# ONE PRODUCT COUNTLESS INNOVATIONS

Expiratory Self Cleaning Technology

24 inch Multitouch Screen

Hold Manoeuvres

Smart FiO2

IOT Based Service

Reusable Neonate Sensor

0.02 LPM Flow Sensing

40,000 Hours Turbine Guarantee

Neonate VC Modes

Quick Action Buttons

Nurse Monitoring Module

Lifetime O2 sensor

Digital Neonate Sensor

Largest LED Warning Bar

Side Stream Cooling

AI Vent

0.02 LPM Flow Sensing

V-TAS

True Aluminium Construction



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