

# Northtech ProveNT Intensive Care Type Ventilator



## NORTHTECH RESPIRATOR THERAPY EQUIPMENT

- Smart safety system and user friendly manual
- Display and sound alarm with levels
- Smart alarm recognition and alarm level
- Stand-By Mode
- Comparable Sensor Measurement and Automatic Calibration(At the opening and on request)
- Oxygen Sensor
- Internal battery with 10 hours
- 5ms Valve Reaction Time
- 100mbar Emergency Valve
- IP 21 impermeability
- Software updating
- Automatic source change
- Workability with Medical Oxygen Concentrator
- Workability with Medical Compressor
- Workability with O2 tube
- Low air and oxygen pressure detection
- Alarm of technical fault,fan breakdown and connection loss
- Power loss and battery level display
- Elegant and modern detailed design
- Right-left and up-down movable,10.1 inch,high resolution,touchscreen
- Touchscreen shortcut buttons
- Upper body seperable from stand
- Expiration valve,easier to use
- Tyres with improved shock absorption and 2 lock system
- External moisturizer slot
- Protector and holder transportation handles
- Pretty cheap consumables
- Minimum maintenance cost
- %100 native design
- 3 years guarantee + 3 years optional guarantee extension
- Fast and quality technical service
- Turkish user manual

## SINGLE DEVICE COMPATIBLE WITH ALL PATIENTS

proveNT works compatible with patients regardless of gender,age.

While it lowers to 20cc Vtidal,it can reach to 150 breath per minute.

Device does calibration automatically while opening.

Makes leakage compensation

It has an adjustable inspiration and expiration holder feature between 1-60 seconds.

proveNT has Nasal Cpap and High Flow Oxygen Therapy mods.

proveNT has integrated nebulizer system.



# proveNT INTERFACE AND SOFTWARE FEATURES

## 10.1 INCH TOUCHSCREEN

proveNT displays system informations with a 10.1 inch high resolution colored screen and provides usage pleasure. It also provides fast access to the values like Fio2, PEEP, breath count, respiration parameters.

With its wide screen, it shows the patient data transiently and makes us understand alarm situations from afar. proveNT interface has a user friendly design.

proveNT offers easy use to the intensive care type medical ventilators, which known as having a complicated usage.

## proveNT SIMULTANEOUSLY SHOWS 3 GRAPHS (PRESSURE-TIME, FLOW-TIME-VOLUME-TIME)

To show the patient's condition to the operator, proveNT shows instant measurement values graphically. Graphs: Pressure-Time, Volume-Time, Flow-Time.

With its graph stopping feature, it offers analyze opportunity by freezing the graphs and loops.

## YOU DESCRIBE THE PATIENT, proveNT DOES THE REST

It has trigger compensation feature.

## GRADUAL ALARM LEVEL AND AUTOMATIC ALARM LIMIT RECOGNITION

proveNT creates sound and display alarm in emergency situations. It adjusts the alarm level gradually and makes easier the use. In system there is both mechanic and software safety systems. Thus provides the safety of patients whom proveNT cures(?). It has alarm mute (2 min.) fast access button.



## proveNT TECHNICAL SPECIFICATIONS

### proveNT MODS FOR CHILD AND ADULT PATIENT TYPES

- P-ACV Pressure Control, Ventilation for assist
- P-SIMV+PS Pressure Control, Pressure Assisted Synchronized Compulsory Ventilation
- P-PSV Pressure Control, Constant Compulsory Ventilation
- APRV Air way Pressure Ejection Ventilation
- SPN-PS Spontaneous Pressure Assisted Ventilation
- SPN-VS Spontaneous, Volume Assisted Ventilation
- V-ACV Ventilation for assist, Volume Controlled
- V-ACV(PRVC) Volume Focused, Pressure Controlled, Ventilation for assist
- V-CMV Constant Compulsory Ventilation, Volume Controlled
- V-SIMV+PS Volume Controlled, Pressure Assisted Synchronized Compulsory Ventilation
- V-SIMV(PRVC)+PS Volume Focused, Pressure Controlled, Synchronized Compulsory Ventilation
- NIV Non-Invasive Ventilation, Smart Trigger Feature Compatible With NIV Mode

### proveNT RUNNING FEATURES

- Inspiration Pressure : 2-100 mBar
- Inspiration Duration : 1-10 second
- Peep Pressure : 2-50 mBar
- Breath Quickness: 0-2000 mL
  - Pediatric : 1-150/min
  - Adult : 1-100/min
- Tidal Volume : 0-2000 mL
- Flow Velocity : 120 L/min
- O2 Blend : 21-100%
- Spontaneous Pressure Support : 0-100 mBar
- I/E ratio : 1:10(x60)-10:1

## proveNT DETAIL FEATURES

- Apnea Duration : 5-60 second, Bidirectional Apnea Ventilation
- Apnea Mode : P-CMV, V-CMV
- Flow Trigger : 0.1-20 lt/min
- Pressure Trigger : 0.1-20 mBar
- Internal Pull : 2-20 mBar, 1-20 Breath
- Trigger Compensation : On-Off
- Volume Assist
  - Pediatric : 0-100 mBar/Lt
  - Adult : 0-100 mBar/Lt
- Inspiration Lag : 1-60 sec
- Expiration Lag : 1-60 sec
- O2 Support : 2 min.

## proveNT PATIENT COMPATIBILITY AND PERFORMANCE

### Child, Pediatric

- Breath Count : 1-150/minute
- T inspiration : 0.1-10 second
- Tidal Volume : 0.02-0.6 Liter
- Trigger Sensivity : 0.1-20 Liter/minute 0.1-20 mbar
- Leakage and Tube Compensation
- Invasive Non-invasive Ventilation

### Adult

- Breath Count : 1-100/minute
- T inspiration : 0.1-10 second
- Tidal Volume : 0.1-3 Liter
- Flow : 1-120 Liter/minute
- Trigger Sensivity : 0.1-20 Liter/minute 0.1-20 mbar
- Invasive Non-invasive Ventilation

## DISPLAYED DATAS

- P Peak : Inspiration Peak Pressure Measurement
- P Peep : Peep Pressure Measurement
- P Plato : Inspiration Plato Pressure Measurement
- P Average : Average Pressure Measurement
- F Inspiration : Inspiration Flow Velocity
- F Expiration : Expiration Flow Velocity
- V Tidal : Tidal Volume
- FiO2 : Oxygen Rate
- Breath Count : Minute Breath Count
- Spontaneous Breath Count : Minute Spontaneous Breath Count
- T Inspiration : Inspiration Duration
- T Expiration : Expiration Duration
- I/E Ratio : Inspiration Duration/Expiration Duration Rate
- AutoPeep : Air Pressure Sticking At the End of Respiration
- P0.1 : 100 ms Occlusion Pressure Measurement
- PTP : Negative Pressure x Negative Pressure Duration
- FTP : Negative Flow x Negative Flow Duration
- P NIF : Negative Inspiration Pressure Force
- Leakage Rate : Leakage Volume Ratio
- Leakage Volume : Leakage Volume at the End of Breath Loop

## ALARM FEATURES

### SOUND AND DISPLAY ALARM, ALARM RECORDING, 2 MINUTE ALARM MUTE

- Inspiration Pressure : Base Limit/Top Limit
- Tidal Volume : Base Limit/Top Limit
- Breath Velocity : Base Limit/Top Limit
- Volume/Minute(?) : Base Limit/Top Limit
- I/E Ratio : Base Limit/Top Limit
- FiO2 : Base Limit/Top Limit
- Apnea Duration : Base Limit/Top Limit
- Leakage : Base Limit/Top Limit

### ELECTRICAL FEATURES

- Battery Duration : 2 Hours
  - +8 Hours,Optional
- Network Voltage : 200-240V AC
- Power Consumption : 47-63 Hz 100 W

### PRESSURE SOURCE FEATURES

- O2 Pressure : 2,5-7 Bar Central System/Tube
- Air Pressure : 2,5-7 Bar Central System/Tube
- Automatic Replacement and Alarm Display at the end of Source Obsolescence
- Workability with Medical Compressor

### GRAPHIC FEATURES

- Pressure-Time Graph
- Flow-Time Graph
- Volume-Time Graph

### SIZE AND WEIGHT

- Height : 150cm
- Depth : 44cm
- Width : 42cm
- Weight : 55kg
- Screen Movement: Portable, Angular, Full Touch Tablet
- Pendant and Column Montage

### DIGITAL INTERFACES

- 4 USB