

# Cvent-1500T

Excellent weaning performance

One intelligent ventilator for Adult-Paediatric-Neonatal



# Cvent-1500T ICU Ventilator

## Technology makes ventilation intelligent - safe to use

Cvent-1500T advance intensive care ventilator integrated with state of art SWISS MADE CMOSens flow sensor technology for fastest sensing & accurate flow delivery to Adult - Paediatric (Tidal volume from 2ml to 2000ml)



### 15.1" Color TFT Screen

Simultaneously display of Three Waveforms & Three Loops.

Three Level color coded audio-visual alarms.

Easy user interface and Multi level mechanism for patient safety with intelligent high alert alarming system, hence increase safety of operation.

### Easy Access to the utilities

Mute, Waveform Freeze, 100% O<sub>2</sub> flushing, Nebulizer, Manual Breath, Inspiratory Hold & Expiratory Hold, Key pad/Touch Screen Lock facility for protection.

### Additional Monitoring\*

EtCO<sub>2</sub>, SpO<sub>2</sub>, Proximal digital Flow Sensor

### Exhalation Valve technology

Anti condensation heated exhalation system with auto sterilization can (Make ICU infection free) Auto-Cleavable at 134 degree can use safely and prevent cross infection. Low maintenance cost, Easily removable, trouble free Active Exhalation Valve technology. Maintenance free, auto self testing & need no routine flow sensor calibration.

### Medical air compressor (Model AF-12)\*

Ensures a constant, compressed air supply in case main central line fail. Unique anti vibration design assures low noise & quiet operation with sound level <56db. Multi level air filtering (5µm), cooling & water removal with auto drain system, gives clean, dry & oil free medical air supply.

### Casters Wheels

Four caster wheels with front locking brakes.

(\*) features are optional upgradable.

# Cvent-1500T ventilator system, customize the treatment of every patient with advance modes & decision supporting tools and monitoring make professional's comfortable

## Less is more

## Automatic system check



### Pre-Test

- Auto check up of the machine
- Checks various parts automatically to ensure proper functioning



### Synchronization

- Time Trigger (no spontaneous breathing)
- Pressure Trigger (spontaneous breathing)
- Flow Trigger



### Easy use Interface

- Simple to operate
- No manual intervention required during system check
- Graphic display of error correction



### Adult-Pediatric Ventilation

Tidal volume from 10ml to 2000ml (Pediatric-Adult) Pressure control mode with tidal volume security/guarantee provide the advantage of volume control ventilation both invasive & non invasive ventilation



### Neonatal Ventilation

Continuous Flow based(VIVE) Proven Technology for neonatal patients helps flushing dead space in Y piece and maintaining PEEP. Cvent provides tidal volume as low as 2 ml



### DuoVent/ APRV Mode

- Provide lung protective ventilation, Use an "open lung" approach including alveolar recruitment, improved oxygenation in ARDS
- Pressure support setting in both lunge for spontaneous breathing to patients.



### SmartVent (Adaptive Ventilation Mode)

- Intelligent mode easy to use & lung protective
- Ensure the guaranteed minute ventilation breath by breath at lowest inspiration pressure & helps patient for spontaneously activity from start ventilation
- Automatically set Parameters according to Body Weight
- Auto Synchronous the flow on patient demand, improve outcome & avoid ventilator fighting on spontaneous



### VG Option (Volume Guarantee)\*

New Approaches in volume control ventilation for neonatal have advantages of less risk for barotraumas because tidal volume delivered is limited reduced peak pressure especially when baby makes significant contribution from spontaneous effort



### Pressure Regulated Volume Control

- Advanced Dual Modes Make Cvent More Comfortable to patient Wean Case to Case
- Deliver Preset Tidal Volume at Same Rate with the Lowest Possible Pressure



### BIPAP S/T (Non-Invasive with Synchrony Feature)

More Unique Benefits , High Performance Non Invasive Ventilation. Also Set Trigger, Rate with Additional Parameters



### O2 Therapy

High flow Oxygen rate in combination with an actively humidified system, to effectively improve the oxygenation of patients through the nasopharyngeal space



### Utilities

- Inspiratory Hold & Expiratory Hold
- 100% O2 flushing
- Manual Breath
- SIGH Breath (Configurable)
- Waveform freeze
- Nebulizer with tidal volume compensation



### Powerful monitoring functions

- Lung mechanics parameters
- Up to 1500 Alarm Events review
- 72-hours Numerical & Graphical trend review
- PV Tools (measure LIP & UIP)\*
- MIP/NIF (Maximum Inspiratory Pressure)\*
- PO.1 (Occlusion Pressure)\*

(\* ) features are optional upgradable.

## Technical Specifications

| Patient Type            | Adult   | Pediatric                  | Neonatal(Optional)  |
|-------------------------|---|----------------------------|---|
| Tidal Volume            | 100-2000 ml   | 10-500 ml                  | 2-50 ml   |
| Frequency               | 1-100 bpm   | 4-150 bpm                  | 4-200 bpm   |
| Apnea Back Up Frequency | 1-100 bpm   | 4-150 bpm                  | 2-200 bpm   |
| Apnea Time              | 3-45 Seconds  | 3-45 Seconds               | 3-45 Seconds  |
| O2 Therapy Flow         | 1-80 L/min  | 1-50 L/min                 | 1-40 L/min  |
| Inspiration time        | 0.1- 12 S (increment:0.1S)  | 0.1- 12 S (increment:0.1S) | 0.1- 3 S (increment:0.1S)   |
| Modes                   | VCV, SIMV-VC, PCV,SIMV-PC, PSV,CPAP+Apnea Backup, APRV, PRVC, SIMV-PRVC,Duovent,VS,SmartVent(Optional)<br>Non-Invasive: BiPAP, BiPAP-S, BiPAP-ST, HFNC/O2 Therapy   |                            | IPPV, SIPPV, SIMV, PSV,CPAP, Non-Invasive: nCPAP, nBPAP HFNC / O2 Therapy |
| T_Pause/T_Rise          | 0-50% /Auto   |                            |   |
| FiO2                    | 21%-100% , 100% O2 (1-5 minutes)  |                            |   |
| Trigger                 | Flow Trigger :0 to 20 L/min, Pressure Trigger : – 20 to 0 cm H2O,ETS: % 5 to 80%  |                            |   |
| Flow range/Pattern      | 0-120 L/min, Square, Decelerating   |                            |   |
| Pressure Control        | 5-120 cmH2O   |                            |   |
| Pressure Support        | 0-120 cmH2O   |                            |   |
| Electronic PEEP         | 0-50 cm H2O (increment:1 cm H2O)  |                            |   |
| I:E Ratio               | 1:9.9 – 9.9:1   |                            |   |
| Nebulizer               | 1-30 minutes (Particle Size_<3 micron)  |                            |   |
| Waveforms & Loops       | Waveforms : P-T, F-T, V-T , Etco2* , Spo2* & Loops : P-V, F-V,P-F   |                            |   |
| Recall / Review         | 1500 alarm events , 72 Hours Numerical & Graphical Trends,  |                            |   |
| Monitoring Parameters   | Ppeak, Pmean, Pplat, PEEP, VTi, VTe, MV, MV_cont., MV_spont, F_Peak_insp, F_Peak_Exp, MVLeak%, Freq, F_cont., F_spont, % F spont, I:E, Ti,Te,Ti/T total, FiO2, (Spo2,Etco2-optional)* Cstat, Cdyn, Rinsp, Rexp, RSBI, WOB, RC, C/C20  |                            |   |
| Alarms                  | Three Level Audio-visual color coded alarms includes,VTe high/low, MV high/low, Tidal volume not reached, High leak,Peak Pressure high/low, Pressure limitation, O2 supply pressure high/low/fail, Air supply pressure,High/low/fail, Apnea, Apnea Backup, Freq high/low, FiO2 high/low, Circle Block, Circle disconnection, Expiatory block,Power: AC Power Fail, Battery Low & Disconnect |                            |   |

## General Specifications

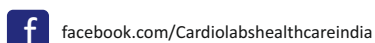
|                         |  |
|-------------------------|--|
| Dimensions/Weight       | 485x405x322 mm (HxWxD) / 12Kg            |
| Communication Interface | VGA, USB, RS232* (optional), CO2,SPO2.   |
| Display                 | 15.1" color TFT Touch Screen (Rotatable) |
| Air/Oxygen Gas supply   | 230 kPa to 600 kPa                       |
| Power Supply            | 100-265V AC, 50/60Hz, 1A, 100 VA ,       |
| Battery                 | 9.6V,12Ah (LiFePO4) Backup > 180min      |

## Safety Standard

|                      |   |
|----------------------|---|
| Basic Construction   | In accordance with IEC 60601-1, IEC 60601-1-2 & EMC 60601-2 |
| Unit Type            | Class 1, Type B, IP21                                       |
| Working Environment  | Temperature : 10 To 40°C                                    |
| Relative Humidity    | 10 to 90% Non Condensing                                    |
| Atmospheric Pressure | 50 to 106 kPa   |

### Variant

⊗ CVTCV15-AB Cvent-1500T/Adult-Basic    
 ⊗ CVTCV15-NB Cvent-1500T/Neo-Basic  
⊗ CVTCV15-UB Cvent-1500T/Universal-Basic



Doc. No. CAT/MKT/001, Issue Date 01-03-2023, Rev.No.1.0

Product design and technical specification subject to change without prior notice due to continuous future up gradation March 2023

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