# Dräger

# Dräger Evita<sup>®</sup> V600 ICU Ventilation and Respiratory Monitoring

Experience the next level of ventilator operation. The Evita<sup>®</sup> V600 combines high performance ventilation with an aesthetic design enabling quick and efficient operation. From the first onset of a lung protective ventilation until the integration of a patient care-centred intensive care workplace.



Dräger. Technology for Life®

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## **Benefits**

#### Operation principle and user interface

The brilliant user interface combined with up-to-date glass touch technology supports intuitive operation.

- Quick and safe to operate even in the most stressful situations due to intuitive menu access to both settings and your clinical data.
- All patient data, alarms and trends are fully recorded. Conveniently exported via USB interface.
- Switch between multiple view configurations with the touch of a finger.
- Step-by-step guidance leads you through every procedure.
- Easy to read and navigate thanks to our new colour concept and glass touch display.
- The 360° alarm light flashes in the color of the corresponding alarm priority and is visible from every direction.

#### **Early Mobilization and Patient Transport**

Support of instant, flexible patient transport through optional hardware components and early mobilization.

- Gas supply unit GS500
- Power supply unit PS500
- Bed Coupling
- Transport supply unit TSU

#### Lung Protective Ventilation

Our comprehensive treatment tools help support your lung protective ventilation strategy.

- Lung protective ventilation for adults, children and neonates: invasive, non-invasive and with O2-therapy
- Advanced lung monitoring and diagnostic features (e.g. Smart Pulmonary View or Low Flow manoeuvre)
- Display of regional ventilation distribution with PulmoVista® 500
- Recruitment tools (e.g. QuickSet<sup>®</sup> and PressureLink) and therapy decision support with breath-by-breath trends (PEEP, EIP, Vt, C<sub>dyn</sub>)
- Focus on end-expiratory lung volume with PC-APRV with AutoRelease®
- Volumetric CO<sub>2</sub>-Monitoring (VCO<sub>2</sub>, VTCO<sub>2</sub>, Slope Phase 3, Vds/VTe)

### **Benefits**

#### **Effective Weaning**

Support of a synchronized way for quick and efficient weaning.

- Automatic weaning with SmartCare®/PS
- Increased variability in spontaneous breathing through Variable Pressure Support or Proportional Pressure Support
- Facilitating spontaneous breathing through "room to breathe concept" with e.g. AutoFlow<sup>®</sup> or Volume Guarantee
- Automatic tube compensation (ATC®) compensates for artificial airway resistance
- Assessment of weaning through RSBi, P0.1 and NIF

#### Connectivity

We envision a future of acute care where medical devices are connected as a system. Interoperability between different devices can help to avoid preventable medical errors and potentially serious inefficiencies. The new standardised network protocol named SDC makes dynamic connectivity in the hospital possible which will allow interoperability of medical devices in the future.

Our first step will be connectivity through CC300:

- Full HL7 data export to HIS: reliability exchange high-quality data in a standardised format between medical devices and EMR.
- Future-proof open connectivity: standardised and secure communication between medical devices with a high level of cyber security.

#### **Comprehensive Services**

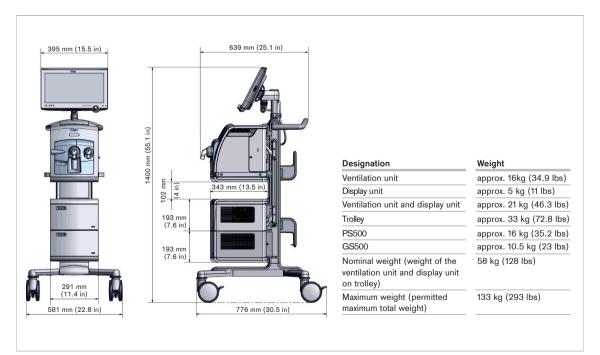
Comprehensive Services encompasses a wide range of service solutions prior, during and after the installation of your purchased units.

- Product Service: i.e. device maintenance
- Professional Service: e.g. IT consulting and system integration
- Training on our products and services: e.g. application training
- Multivendor Service: maintenance for your entire medical equipment regardless of the manufacturer
- Digital Services: e.g. network-based services and analysis of device data

# Awards



# **Physical Specifications**



Dimensions and weights of the Evita V600

### Accessories



#### **Ventilation Accessories**

Day in, day out in the hospital you are faced with enormous time and cost pressures at the same time you are taking care of the welfare of your patients. You need technical medical accessories which you can use to unlock the full potential of your equipment, which work smoothly, ensure the best possible care of your patients and help you to improve your processes. In short: accessories you can rely on, Dräger can supply it for you. Find them in our accessory catalogue.

## **Related Products**



#### Dräger PulmoVista<sup>®</sup> 500

Making ventilation visible. Put the power of Electrical Impedance Tomography (EIT) to work for you and your patients. With the PulmoVista<sup>®</sup> 500, you can visualise regional ventilation distribution within the lungs – non-invasive, in real time and directly at bedside.



#### Nitric Oxide Therapy

The NO application device NO-A is a therapy device for the application of NO therapy gas in the ventilation flow of an intensive care patient in connection with several Dräger ventilation units. NO inhalation therapy reduces the clinical necessity of a right-to-left shunt and contributes to cardiac relief. In order to improve the oxygenation of ventilated patients nitrogen monoxide (NO) is added to the respiratory gas. Inhaled NO has a dilating effect on the blood vessels in the lung. The target concentration is set on NO-A and the delivered gas volume is automatically and electronically adjusted to the values of the ventilation system via Medibus connection.

# **Related Products**



#### **Connectivity Converter CC300**

Sharing information amongst medical devices, and with clinical information systems, increases the efficiency of acute care delivery. The Connectivity Converter CC300 enables Dräger point-of-care devices to communicate with one another and with systems along the hospital's existing clinical network.

Patient type	Adults, paediatric patients, neonates
Ventilation settings	
Ventilation mode	Volume controlled ventilation:
	- VC-CMV
	– VC-SIMV
	- VC-AC
	– VC-MMV
	Pressure controlled ventilation:
	- PC-CMV
	<ul> <li>PC-BIPAP1 / SIMV+</li> </ul>
	- PC-SIMV
	- PC-AC
	- PC-APRV
	- PC-PSV
	Support of spontaneous breathing:
	– SPN-CPAP/PS
	- SPN-CPAP/VS
	– SPN-CPAP
	– SPN-PPS
Enhancements	<ul> <li>AutoFlow<sup>®</sup> / Volume Guarantee</li> </ul>
	<ul> <li>Variable Pressure Support</li> </ul>
	<ul> <li>Smart Pulmonary View</li> </ul>
	<ul> <li>Automatic Tube Compensation (ATC<sup>®</sup>)</li> </ul>
	<ul> <li>SmartCare<sup>®</sup>/PS 2.0 – Automated clinical protocol in SPN- CPAP/PS</li> </ul>
	<ul> <li>Low Flow PV Loop</li> </ul>
Special procedures	- Suction manoeuvre
-FE	<ul> <li>Manual inspiration/hold</li> </ul>
	<ul> <li>Medication nebulisation</li> </ul>
	– P0.1
	– PEEPi
	– NIF
Therapy types	– Invasive ventilation (Tube)
	<ul> <li>Non-invasive ventilation (NIV)</li> </ul>
	– O <sub>2</sub> -therapy
Respiratory rate (RR)	Adult 0.5 to 98/min
	Paediatric patients, Neonates 0.5 to 150/min
Inspiratory time (Ti)	Adults 0.11 to 10 s
	Paediatric patients, Neonates 0.1 to 10 s
Tidal volume (VT)	Adults 0.1 to 3.0 L
Tidal volume (VT)	Paediatric patients 0.02 to 0.3 L
	Neonates 0.002 to 0.1 L
In an instant, flow, (Flow)	
Inspiratory flow (Flow)	Adults 2 to 120 L/min
Martineau distances to the distance of the	Paediatric patients 2 to 30 L/min
Maximum flow during non-invasive ventilation of neonates (Flow max)	0 to 30 L/min
Inspiratory pressure (Pinsp)	1 to 95 mbar (or hPa or cmH <sub>2</sub> O)
Pressure limitation (Pmax)	2 to 100 mbar (or hPa or cmH <sub>2</sub> O)
Positive end-expiratory pressure (PEEP)	0 to 50 mbar (or hPa or cmH <sub>2</sub> O)
Additional intermittent PEEP for sighs (AintPEEP)	0 to 20 mbar (or hPa or cmH <sub>2</sub> O)
Additional intermittent PEEP for sighs (ΔintPEEP)	0 to 20 mbar (or hPa or cmH <sub>2</sub> O)

Pressure support (Psupp)	0 to 95 mbar (or hPa or cmH <sub>2</sub> O)
Pressure rise time (Slope)	Adults, Paediatric patients 0 to 2 s
	Neonates 0 to 1.5 s
O <sub>2</sub> concentration (FiO <sub>2</sub> )	21 to 100 Vol. %
Trigger threshold (Flow trigger)	0.2 to 15 L/min
Automatic Tube Compensation (ATC <sup>®</sup> )	Inside tube diameter tube Ø
	<ul> <li>Endotracheal tube ET</li> </ul>
	Adults 5 to 12 mm (0.2 to 0.47 inch)
	Paediatric patients 2 to 8 mm (0.08 to 0.31 inch)
	Neonates 2 to 5 mm (0.08 to 0.2 inch)
	<ul> <li>Tracheostoma tube (Trach.)</li> </ul>
	Adults 5 to 12 mm (0.2 to 0.47 inch)
	Paediatric patients 2.5 to 8 mm (0.1 to 0.31 inch)
	- Degree of compensation 0 to 100 %
Airway Pressure Release Ventilation (APRV)	
Inspiratory time (Thigh)	0.1 to 30 s
Expiratory time (Tlow)	0.05 to 30 s
Maximum duration of lower pressure level (Tlow max)	0.05 to 30 s
Upper pressure level (Phigh)	1 to 95 mbar (or hPa or cmH <sub>2</sub> O)
Lower pressure level (Plow)	0 to 50 mbar (or hPa or $cmH_2O$ )
Expiration termination criterion (in relation to the peak expiratory	1 to 80 % (PEF)
flow) (Exp. term.)	
Proportional Pressure Support (SPN-PPS)	
Flow-based assistance (Flow Assist)	Adults 0 to 30 mbar/L/s (or hPa/L/s or cmH <sub>2</sub> O/L/s)
	Paediatric patients 0 to 100 mbar/L/s (or hPa/L/s or cmH <sub>2</sub> O/L/
	s)
	Neonates 0 to 300 mbar/L/s (or hPa/L/s or cmH <sub>2</sub> O/L/s)
Volume-based assistance (Vol. Assist)	Adults 0 to 100 mbar/L (or hPa/L or cmH <sub>2</sub> O/L)
corresponds to compliance compensation	10000 to 10 mL/mbar (or mL/hPa or mL/cmH <sub>2</sub> O)
	Paediatric patients 0 to 1000 mbar/L (or hPa/L or cmH <sub>2</sub> O/L)
corresponds to compliance compensation	10000 to 1 mL/mbar (or mL/hPa or mL/cmH <sub>2</sub> O)
	Neonates 0 to 4000 mbar/L (or hPa/L or cmH <sub>2</sub> O/L)
corresponds to compliance compensation	1000 to 0.3 mL/mbar (or mL/hPa or mL/cmH <sub>2</sub> O)
O <sub>2</sub> -therapy	Continuous Flow 2 to 50 L/min, BTPS
	O <sub>2</sub> concentration FiO <sub>2</sub> 21 to 100 Vol %
Leakage compensation	On/Off
	On: full compensation active
	Off: only trigger compensation active
Displayed measured values	
Airway pressure measurement	Plateau pressure (Pplat)
Airway pressure measurement	Positive end-expiratory pressure (PEEP)
	Peak Inspiratory Pressure (PIP)
	Mean airway pressure (Pmean)
	Minimum airway pressure (Prinean) Minimum airway pressure (Pmin)
	•••
	Range -60 to 120 mbar (or hPa or cmH <sub>2</sub> O)

Flow Measurement	
Minute volume measurement	Expiratory minute volume, overall, not leakage-corrected (MVe
	Inspiratory minute volume, overall, not leakage-corrected (MVi
	Minute volume, leakage-corrected (MV)
	Mandatory expiratory minute volume, overall, not leakage- corrected (MVemand)
	Spontaneous expiratory minute volume, overall, not leakage-
	corrected (MVespon)
	Range 0 to 99 L/min BTPS
Tidal volume measurement	Tidal Volume, leakage-corrected (VT)
	Mandatory inspiratory tidal volume, not leakage-corrected
	(VTimand)
	Mandatory expiratory tidal volume, not leakage-corrected
	(VTemand) Spontaneous inspiratory tidal volume, not leakage-corrected
	(VTispon)
	Range 0 to 5500 mL BTPS
Respiratory rate measurement	Respiratory rate (RR)
	Mandatory respiratory rate (RRmand)
	Spontaneous respiratory rate (RRspon)
	Range 0/min to 300/min
O <sub>2</sub> measurement (inspiratory side)	Inspiratory O <sub>2</sub> concentration (in dry air) (FiO <sub>2</sub> )
	Range 18 to 100 Vol %
CO <sub>2</sub> measurement in main flow	End-tidal CO <sub>2</sub> concentration (etCO <sub>2</sub> )
(adults and paediatric patients only)	Range 0 to 100 mmHg
Displayed calculated values	
Dynamic compliance (Cdyn)	Range 0 to 650 mL/mbar (or mL/hPa or mL/cmH <sub>2</sub> O)
Resistance (R)	Range 0 to 1000 mbar/L/s (or hPa/L/s or cmH <sub>2</sub> O/L/s)
Leakage minute volume (MVleak)	Range 0 to 99 L/min, BTPS
Rapid shallow breathing index (RSBI)	Adults 0 to 9999 (/min/L)
	Paediatric patients 0 to 9999 (/min/L)
	Neonates 0 to 300 (/min/L)
Negative Inspiratory Force (NIF)	Range -80 mbar to 0 mbar (or hPa or cmH <sub>2</sub> O)
Occlusion pressure P0.1	Range 0 to -25 mbar (or hPa or cmH <sub>2</sub> O)
Waveform displays	Airway pressure Paw (t) -30 to 100 mbar (or hPa or cmH <sub>2</sub> O)
	Flow (t) -180 to 180 L/min
	Volume V (t) 2 to 3,000 mL
	CO <sub>2</sub> (t) 0 to 100 mmHg
Alarms / Monitoring	
Expiratory minute volume (MVe)	High / Low
Airway pressure (Paw)	High
Inspiratory O <sub>2</sub> concentration (FiO <sub>2</sub> )	High / Low
End-tidal CO <sub>2</sub> concentration (etCO <sub>2</sub> )	High / Low
Respiratory rate (RR)	High
Volume menitoring (VT)	High / Low
Volume monitoring (VT)	5

Disconnection alarm time (Tdiscon)	0 to 60 seconds
Performance data	
Control principle	Time-cycled, volume-constant, pressure-controlled
Length of intermittent PEEP	1 to 20 expiratory cycles
Medication nebulization	For 5, 10, 15, 30 minutes, continuously (∞)
Inspiratory flow	Max. 180 L/min, BTPS
Base flow, adults	2 L/min
Base flow, pediatric patients	3 L/min
Base flow, neonates	6 L/min
Inspiratory valve	Opens if medical compressed air supply fails (supply gas flow is not sufficient to provide the inspiratory flow required), enables spontaneous breathing with ambient air.
Endotracheal suction	
Disconnection detection	Automatic
Reconnection detection	Automatic
Preoxygenation	Max. 3 minutes
Active suction phase	Max. 2 minutes
Postoxygenation	Max. 2 minutes
Factor for paediatric patients and neonates	1 to 2
Supply system for spontaneous breathing and Psupp	Adaptive CPAP system with high initial flow
Operating data	
Mains power supply	
Electric power inlet	100 V to 240 V, 50/60 Hz
Current consumption	
At 230 V	Max. 1.3 A
At 100 V	Max. 3.0 A
Inrush current	Approx. 8 to 24 A peak
	Approx. 6 to 17 A quasi RMS
Power consumption	
Maximum	300 W
During ventilation, without charging the battery	Approx. 100 W ventilation unit with display unit
	Approx. 180 W with GS500
Gas supply	
O <sub>2</sub> positive operating pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Air operating pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Battery details	
Internal battery of ventilation unit (without PS500)	Type NiMH battery, sealed
Battery runtime	Without GS500 30 minutes With GS500 15 minutes
Batteries in the PS500 power supply unit	Type LFP batteries
Batteries in the PS500 power supply unit	Without GS500 240 minutes
Battery runtime	With GS500 240 minutes With GS500 120 minutes
Automatic switch over from internal to external battery	
Battery test available	
The battery runtime applies when the batteries are fully charge	ged and new and ventilation is typical.

Screen values	
Evita V600 diagonal screen size	15.6 inches
Input / Output ports	- 3 external RS232 (9-pin) connectors
	<ul> <li>4 USB ports for data collection</li> </ul>
	<ul> <li>1 LAN port</li> </ul>
Touchscreen technology	Capacitive touchscreen with glass front
Aspect ratio	16:9
Resolution	1366 x 768 pixels
Digital machine output	Digital output and input via an RS232 C interface
	Dräger MEDIBUS <sup>®</sup> and MEDIBUS <sup>®</sup> X

<sup>1</sup> BIPAP, trademark used under license. ATC<sup>®</sup>, trademarked by Dräger. AutoFlow<sup>®</sup>, trademarked by Dräger.

BTPS - Body Temperature Pressure Saturated. Measured values relating to the conditions of the patient lung 37° C (98.6° F),

steam-saturated gas, ambient pressure.

1 mbar = 100 Pa

Some functionalities are available as an option.

Notes

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