Dräger medical

A Dräger and Siemens Company

Oxylog 3000

Better to have one

Emergency Care · Perioperative Care · Critical Care · Perinatal Care · Home Care

Because you care

breathe ea

Time and time again, Dräger has contributed to major advances in emergency medicine with innovative masterpieces of medical engineering. Back in 1907, the portable Pulmotor was the world's first emergency ventilator and resuscitator.
In 1978 Dräger again set new standards in primary care with the first Oxylog ventilator. The brand-new Oxylog 3000 is yet another benchmark in emergency and transport ventilation.

The ventilator of choice for emergency and transport ventilation

- High contrast EL display
- Oxygen blender for 40 - 100% of O_2
- New modes - BIPAP*, ASB, NIV
- Suitable for small children
- Durable for tough, outdoor conditions

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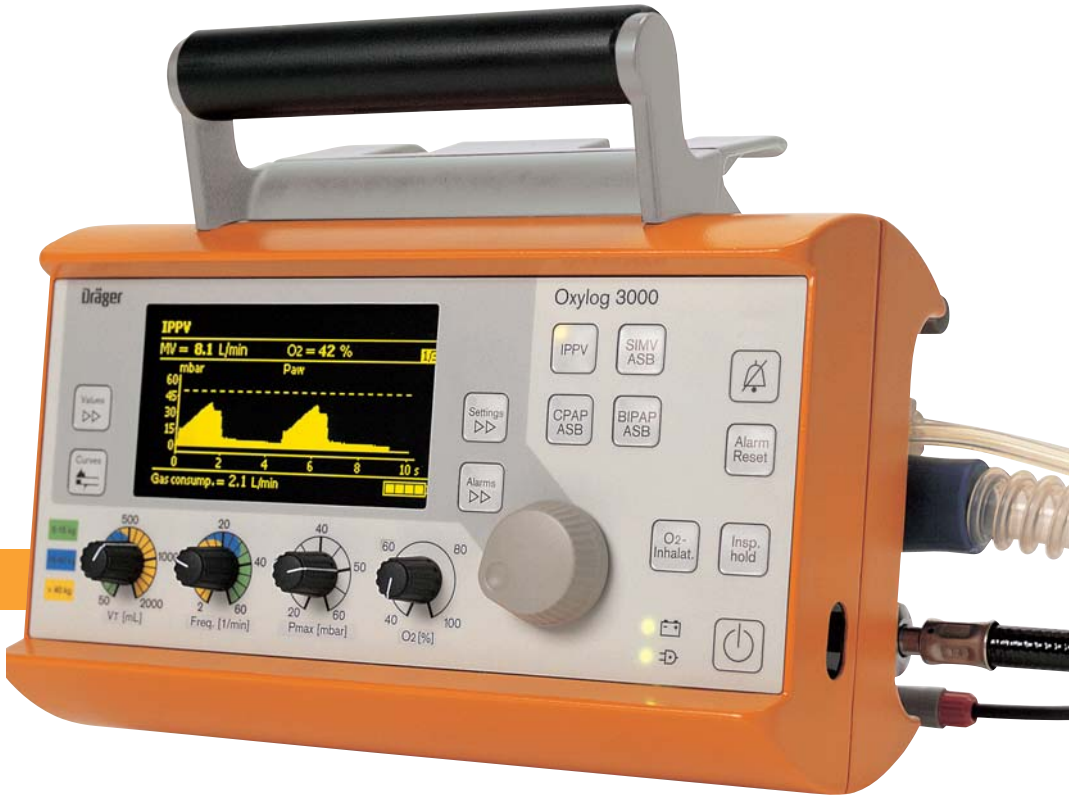


Better ventilation performance

The Oxylog 3000 offers a sophisticated performance in emergency and transport ventilation - so good it can be used to ventilate critical-care patients in transfer situations. Your patients will appreciate not having to fight what they often feel is unpleasant: controlled ventilation. Here, the SIMV mode and other spontaneous modes can actively support a patient's breathing.
A new option is the combination of pressure-controlled and spontaneous ventilation during the entire breathing cycle (BIPAP*). Similar to a paramedic feeling the changed pressure in the bag when a patient starts breathing again, the Oxylog 3000 recognizes insufficient spontaneous breathing and can automatically support the patient's breathing (ASB*). If intubation is to be avoided, non-invasive mask ventilation (NIV) with leakage compensation is possible. In the event of an apnea in the CPAP/PS mode, the Oxylog 3000 automatically initiates volume-controlled mandatory ventilation after a user defined apnea time.

But the Oxylog 3000 is not just distinguished by a wide range of ventilation modes. A tidal volume that starts at just 50 ml allows the Oxylog 3000 to be used for small children, while the patented blender permits a low oxygen concentration of as little as 40%. The oxygen concentration is continuously adjustable from 40 to 100%. When it comes to transport ventilation performance, it's better to have an Oxylog 3000.

"If I need to be ventilated, I would rather be ventilated with this device."
Educational and equipment nurse, University Hospital, Göteborg, Sweden

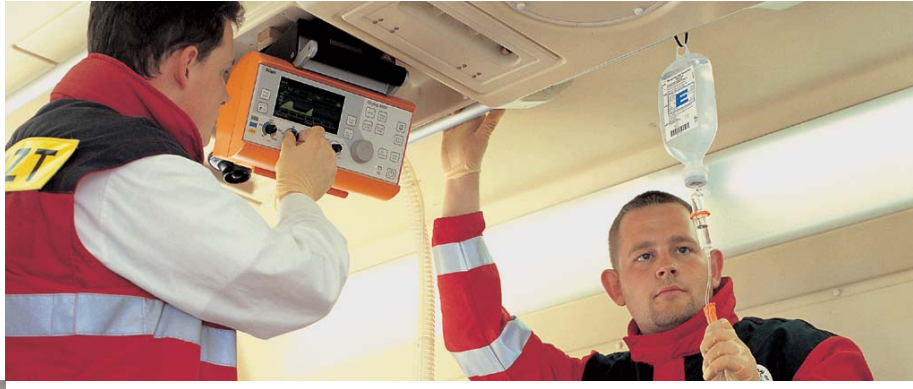
"A milestone in ventilation."
Anesthesist, Elda Hospital, Spain

"Good impression, good feeling. Device is small and strong and simple to use. Very good trigger for pressure support."
Anesthesist, Pre-Hospital Emergency Unit, Lariboisière, France

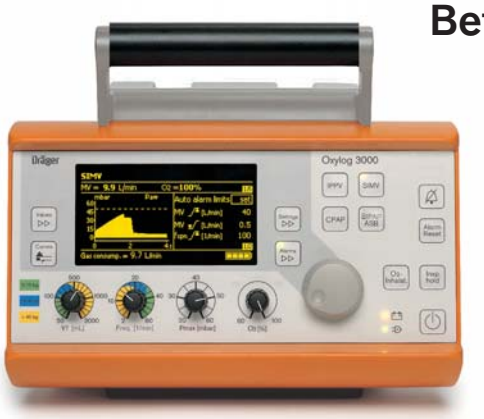
"The parameter and alarm settings and operating concept are all good."
Operational field trials, Berner Oberland, Switzerland

"You're often worried about new devices if they have to support vital functions. You're all tensed up if you don't really know how to use a device. But I wasn't in the least afraid of the Oxylog 3000 so I'm looking forward to ventilating a patient with this device because it is extremely user-friendly."
Anesthesist, Lübeck University Hospital, Germany

* BIPAP = PCV +, ASB = PS

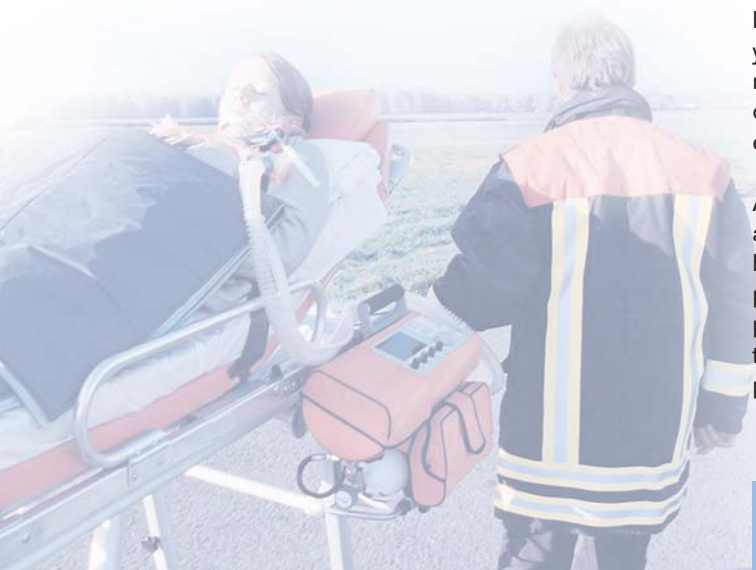


Better for transport



Despite the Oxylog 3000's outstanding ventilation qualities, this device is as tough as they come. It is designed to withstand being dropped from heights of up to 75 cm (29.5 inches), is suitable for use in helicopters, is spray-proof and functions well in extreme temperatures. Its entirely new design is light, compact and easy to carry because the Oxylog 3000 is driven by a high-pressure gas supply, no internal blower is necessary. Another innovation is the Oxylog's smart battery. It will last for up to four hours, has a built-in chip to provide remaining battery capacity information and is easy to exchange. The Oxylog 3000 also offers options such as 100% O_2 flush or O_2 inhalation. When the conditions get tough, it's better to have an Oxylog 3000.

Better and safe operation



The Oxylog 3000 is designed to make life easier for the operator. Dräger's well known rotary knob brings a convenient level of simplicity to the vital business of setting parameters. One hand and three simple steps, "select - adjust - confirm", are all you need. In addition to the rotary knob, a common feature of many Dräger devices, the Oxylog 3000 also has four direct control knobs that enable parameters to be set quickly - often essential in emergency situations.

As well as setting ventilation parameters, reading them quickly and accurately is just as important. The Oxylog 3000's large, high-contrast display shows readings, settings and flow or pressure curves at a glance. Alarm signals and status displays provide additional help in spotting problems and dealing with them quickly. In critical emergency care situations you and your patient will be better off with an Oxylog 3000.

Technical data

Oxylog® 3000 is a time-cycled, volume-constant and pressure-controlled emergency and transport ventilator for patients with a tidal volume starting at 50 mL.

Dimensions of basic unit (W x H x D)	285 x 184 x 175 mm / 11.10 x 7.24 x 6.89 inch (excluding handle)
Weight of basic unit	Approx. 5,4 kg / 11.9 lbs (including internal battery)
Gas supply	From a central gas supply system or from a medical gas cylinder
Supply gas	Medical Oxygen or Medical Air
Supply pressure	39 - 87 PSI / 270 - 600 kPa at 100 L/min
Gas consumption for internal control	0.1 to 0.5 L/min
Operating data	
Ventilation modes	IPPV/IPPV$_{assist}$*, SIMV, SIMV/ASB*, BIPAP*, BIPAP*/ASB*, CPAP, CPAP/ASB*
Special modes	• NIV (Non-invasive (mask)-ventilation with leakage compensation) • Apnea Ventilation (For switching over automatically to volume-controlled mandatory ventilation, if breathing stops)
CPR-mode	Pressure-limited, non-constant-volume ventilation during inspiration time when Pmax is reached
Ventilation frequency Freq:	2 - 60 L/min (SIMV and BIPAP*); 5 - 10 L/min (IPPV*); 12 - 60 L/min (Apnea ventilation)
Tidal volume V_T	50 to 2000 mL, BTPS**
Ventilation time ratio I:E (IPPV*)	1:4 to 3:1
Inspiration time $T_{insp.}$ (SIMV, BIPAP*)	0.2 to 10 sec
Inspiratory pressure $P_{insp.}$	PEEP + 3 to 55 mbar / cmH_2O
O_2 concentration	40 to 100%, infinitely adjustable
PEEP	0 to 20 mbar / cmH_2O
Trigger sensitivity (flow trigger)	3 to 15 L/min
Pressure support Δ ASB*	0 to 35 mbar / cmH_2O (relative to PEEP), rise time adjustable in 3 steps
Max. inspiratory flow	100 L/min (supply pressure > 350 kPa / 51 PSI), 80 L/min (supply pressure < 350 kPa / 51 PSI)
Measured value display	MV, f, V_{Te}, PEEP, P_{mean}, P_{peak}, P_{plat}, MV_{spn}, f_{spn}, O_2***
Display	Technology: Electro-luminescence Pixels: 240 * 128, Visible area: 108 * 56 mm / 4.25 x 2.20 inch
Curve display	Pressure curve, flow curve
Power supply	
Input voltage	19 V DC
AC/DC power pack	100 to 240 V AC / 19 V DC
DC/DC converter	10 to 32 V DC / 19 V DC
Battery types	Lithium ion or Nickel metal hydride alternatively
Operating time (fully charged, "typical" ventilation)	Approx. 4 hours (Lithium ion), Approx. 3 hours (Nickel metal hydride)
Battery charging time	Approx 5 hours (Lithium ion); Approx 4 hours (Nickel metal hydride)
Monitoring	
Supply pressure low	Supply pressure < 270 kPa / 39 PSI
Airway pressure (Paw high)	Adjustable from 20 to 60 mbar / cmH_2O
Airway pressure (Paw low)	When pressure difference between Insp. and Exp. < 5 mbar / cmH_2O or when the set pressure level is not reached
Apnea alarm time T_{Apnea}	When respiratory activity is no longer detected, adjustable from 15 to 60s
Leakage (not in NIV)	$V_{Texp.}$ is approx. 40% lower than $V_{Tinsp.}$
High frequency	Patient breathes at a high spontaneous rate
Operating conditions	
Temperature	- 20 to 50 °C / 14 to 122 °F
Atmospheric pressure	570 to 1200 hPa / 17 to 35 in. Hg
Rel. humidity	5 to 95%
Electromagnetic compatibility EMC:	In accordance with IEC/EN 60601-1-2:2001 and ISO 10651-3
Airworthiness:	In accordance with RTCA DO-160D, sections 7, 8 & 21
Mechanical strength:	In accordance with MIL STD 810F, method 514.5
Classification according to MDD 93/42/EEC	Class IIb
UMDNS-Code	18-098

* BIPAP = PCV +, IPPV = CMV, ASB = PS

** BTPS: Body Temperature, Pressure, Saturated. Measured values referred to the conditions of the patient's lungs, body temperature 37 °C / 99 °F, ambient pressure, water-vapour-saturated gas.

*** Indirect measurement of O_2 concentration (calculated from two measured flows)

Order List Oxylog 3000

Oxylog 3000 Time-cycled, volume constant and pressure controlled emergency and transport ventilator. Including Oxylog 3000, ventilation accessories and battery pack.	2M 86300
Battery to choose:	
Lithium Ion battery Approx. 4 hours operating time	2M86 733
Nickel Metal Hydride battery Approx. 3 hours operating time	2M86732
Ventilation accessories to choose:	
Ventilation hose 1,5 m / 38 inch (reusable) Reusable ventilation hose including flow measuring tubes, 1,5 m / 38 inch.	8412068
Ventilation hose 3,0 m / 76 inch (reusable) Reusable ventilation hose including flow measuring tubes, 3,0 m / 76 inch.	8412913
Ventilation valve (reusable)	8412001
Flow sensor (reusable)	8412034
Angled connector 90° (reusable)	8412235
Ventilation hose, 1,5 m / 38 inch Set of 5, disposable.	5703041
Gas Supply System To connect the Oxylog 3000 to an oxygen cylinder and/or central gas supply. The central gas supply is automatically selected by the optional Automatic Gas Source Switch when the oxygen cylinder and central gas supply are simultaneously connected.	5704500

Oxylog 3000

Battery

Optional power supply	
DC / DC converter 10 - 32 V DC For converting a variety of vehicle voltages to the necessary operating voltage. Includes wall mounting bracket.	2M86731
AC / DC power supply 100 - 240 V AC / 50 - 60 Hz For converting the country specific mains voltage to the necessary operating voltage.	2M86730
Other optional accessories	
Battery charging station For charging the battery externally and independently of the device.	2M86729
Test lung For performing the regular device check.	8403201
Equipment Holder For mounting Oxylog 3000 to the ceiling panel or side panels of vehicles or helicopters; horizontally rotatable, shockproof 20G	2M86900
Carrying System 3000 This ergonomically designed system provides an integrated solution for carrying and transporting an Oxylog 3000, oxygen cylinders and accessories.	2M86975

AC-DC power pack

Battery charging Station

Equipment holder

DC-DC converter

Carrying System 3000

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The quality management system at
Dräger Medical b.v. is certified according
to ISO 13485, ISO 9001 and Annex II of
Directive 93/42/EEC (Medical devices).

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