

MISTRAL ANAESTHETIC MACHINE

Featuring..

- » High quality, fully equipped anaesthesia workstation.
- » All components designed and manufactured in UK.
- » Fully integrated, ergonomically positioned ventilator and absorber.
- » Up to eight ventilation modes, pressure and volume controlled.
- » Low flow environmentally friendly open or closed circuit anaesthesia.
- » Pendant mounted versions available.
- » Selectatec® compatible backbar with interlock.
- » Oxygen monitor, flowmeter backlight and EFM (Electronic Flow Monitor) options available.
- » Modern styling. Intuitive function, easily operable and highly efficient.
- » Extremely low cost maintenance with all components designed for ease of service.
- » Open architecture offering multiple configurations to suit your exact specifications and requirements.
- » Optional patient monitor with 12.1" or 15" TFT colour display, extensive parameter options, rechargeable Li-ion battery (Lynx 1200 or Lynx 1500 models).



FOR MORE INFORMATION OR PRICING, PLEASE CONTACT OUR SALES TEAM



+44 (0)1756 700687



sales@norvap.com



www.norvap.com



Units 1 & 2 Union Business Park, Snaygill
Industrial Estate, Skipton, BD23 2QR



MISTRAL ANAESTHETIC MACHINE

The Mistral is our latest fully featured high-end anaesthesia workstation designed to meet and fulfill all the requirements of the modern operating room – both for today and tomorrow.

Designed with the patient at the centre of the focused proposition with an unsurpassed range of multi-choice build specifications and features with numerous options and configurations to ensure your specific requirements are met. The Mistral combines all the benefits of an integrated system with the flexibility and ease of use of a modular design.

- » The UK designed and manufactured workstation platform is an ergonomic mix of solid plastic mouldings and unyielding extruded aluminium offering strength and flexible design options. The modular construction features a vertical tee-slot mounting system providing open architecture for incorporation of monitors and accessories
- » Fully compliant to all ISO and CE Regulations and conforms to RoHS 2 Directive 2011/65/EU (Restrictions of Hazardous Substances)
- » The Mistral incorporates a proven and well tested conventional flow control system with a mechanical anti-hypoxic system ensuring maximum patient safety
- » The Mistral can be fitted with a wide range of territory specific power socket types and configurations. Accessories such as AGSS and suction controllers are also available
- » Maintenance and after-sales support is always included with any equipment sale (subject to an additional cost where applicable). Generous warranties and on-site training offer continued peace of mind to the user
- » 12.1" or 15" high-resolution TFT screen multi-parameter patient monitor can be supplied. Measures NIBP, RESP, SpO₂, ECG, 2 x TEMP and PR as standard with optional IBP, EtCO₂ and CSM (Lynx 1200 or Lynx 1500 models)
- » EFM (Electronic Flow Monitor) option available offering numeric representation of gas flows on a 3.5" TFT colour screen

Anaesthesia workstation – configurations and components

- » Dual flow tubes with two or three gases and low flow cascade tubes on all gases. Back light option is also available. An additional digital display oxygen monitor can also be incorporated
- » Standard configuration is with three stainless steel drawers and extendable writing tablet and optional flowmeter back lighting. Up to four pin-index cylinder yokes and mini Schrader connections for oxygen and air can be added
- » Common gas outlet (CGO) with emergency oxygen flush and breathing circuit hook. In addition there is a flowmeter on/off pneumatic switch
- » 125mm castors with independently braked front castors. There are rear handles for ease of manoeuvrability
- » One, two or three station Selectatec® backbar to accommodate all significantly available vaporizers
- » Includes a multifunction anaesthesia ventilator fully integrated into the machine. Designed for adult and paediatric use, having full integration with both the absorber and anaesthetic machine. Several advanced ventilation modes, including volume-control and pressure-control. With a large 10.4" or optional 15.4" screen, the ventilator has integrated oxygen monitoring and spirometry
- » The carbon dioxide absorber with both "ventilator" and "bag" mode switching. It fits neatly onto the Mistral and incorporates a quick release canister. The major components are autoclavable and it has a bypass valve for canister removal without loss of fresh gas. Built in oxygen sensor and a swivelling, ergonomically designed breathing bag arm compliment the intuitive design

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MISTRAL ANAESTHETIC MACHINE

Mistral III Integrated Gas Analyser Specifications

Respirator Anaesthesia Ventilator

- » Intuitive 10.4" TFT touch screen control with large easy to read colour screen. Optional 15.4" touch screen also available
- » Volume, PCV, Spontaneous, PSV-plus, SIMV and SMMV modes
- » Integrated Oxygen monitor with pop up key pad adjustment
- » Variable orifice based Spirometry
- » Electronic PEEP
- » 4 hour battery backup
- » Patient select initial screen
- » User selectable patient weight default settings for 3, 10, 25, 50, 70 and 100kg
- » User saveable patient configured settings with custom naming facility – six off
- » Patient setting confirm button
- » Touch screen set buttons for ventilator settings
- » Pop up key pads for adjusting ventilator settings – Oxygen alarm, Minute volume, Tidal volume,
- » Pressure limit and Target, PEEP, Rate – BPM, and I:E Ratio
- » Measured value display box
- » Colour coded wave forms
- » Mode button display box with second row prompt arrow
- » Ventilation mode select button – usable during surgical procedures with User confirm
- » Mute button with 120 second delay and reset facility
- » Gas mix option with pop up menu
- » Language options
- » Time display
- » Case time with stop and reset facilities

Flowmeter Specification

- » 3 gas flowmeter – Oxygen, Nitrous Oxide and Air
- » Photo luminescent back light – optional
- » Nitrous Oxide / Air switch – optional
- » Mechanical anti hypoxic device – gear driven – 25% minimum Oxygen
- » Dual flow tubes for all gases – 100 to 1000 ml and 1 to 10 litres

Pneumatic Specification

- » 1, or 2 station Selectatec® backbar with integrated pressure relief valve
- » Selectatec® is a registered trademark of Datex Ohmeda
- » Common gas outlet with 22 mm male taper and 15 mm female
- » Pipeline Input – NIST or DISS
- » Cylinder yokes for E size cylinders – 4 maximum
- » Oxygen Failure device – shuts off Nitrous Oxide
- » Oxygen Failure alarm – whistles when low oxygen pressure
- » Oxygen and Air high pressure outlets – 3 maximum

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MISTRAL ANAESTHETIC MACHINE

Gas Analyser Specification

Operation Characteristic Values

Dimensions	68 × 82 × 88 mm / 2,68" × 3,23" × 3,46"
Weight	<600 g (1.32 lbs)
Voltage input range	12 V–32 V (-5 % +10 %)
Power consumption:	
Steady state	≤6 W (depending on variation)
Warm up	≤18 W (depending on variation)

Operation Conditions

Ambient temperature Ambient relative humidity	+10 to +50 °C / 50 to 122 °F 5 to 95 % (without condensation)
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This is valid for modules embedded in PI housing.

Gas Measurement

Method	Sidestream gas measurement
Sampling rate	200 mL/min ±20 mL/min
Automated cyclical zeroing / duration	once per day (first zeroing 35 minutes after power on, then once every 24 hours) / ≤20 s
O₂ (optional—depends on variation)	
Range	0 to 100 Vol.-%
Accuracy Rise time (t10 ... 90)	±(2.5 Vol.-% +2.5 % rel.) <500 ms
CO₂	
Range	0 to 13.6 Vol.-%
Accuracy Rise time (t10 ... 90)	±(0.43 Vol.-% +8 % rel.) <300 ms
N₂O	
Range	0 to 100 Vol.-%
Accuracy Rise time (t10 ... 90)	±(2 Vol.-% + 8% rel.) <300 ms

Anaesthetic Gases

Range	Halothane	0 to 8.5 Vol.-%
	Isoflurane	0 to 8.5 Vol.-%
	Enflurane	0 to 10 Vol.-%
	Sevoflurane	0 to 10 Vol.-%
	Desflurane	0 to 20 Vol.-%
Accuracy		±(0.20 Vol.-% +15 % rel.)
Rise time (t10 ... 90)		<450 ms

Automatic Detection

Primary gas	At the latest at 0.3 Vol.-%
Secondary gas	At the latest at 0.4 Vol.-% With a Desflurane concentration greater than 4 Vol.-%, mixture detection occurs at the latest when the concentration of the second anesthetic gas rises above 10 % of the Desflurane concentration.

Respiratory Rate

Range	0 to 100/min
Accuracy	0 to 60/min: ±1/min >60/min: not specified
Resolution	1/min

Complied Standards

ISO 80601-2-55, IEC 60601-1

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