OES MEDICAL

"Safe, Reliable and Affordable" Quality British Design and Manufacturing

Astra 3 *i* Anaesthesia Machine



- High quality, fully equipped anaesthesia workstation
- All components designed and manufactured in Oxford, UK
- Fully integrated, ergonomically positioned ventilator and absorber
- Up to six ventilation modes, pressure and volume controlled
- Low flow environmentally friendly open or closed circuit anaesthesia
- MRI options and 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)



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The OES Medical ASTRA 3 i is our latest fully featured high-end anaesthesia workstation designed to meet and fulfil 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 Astra 3 *i* 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 Astra 3 *i* incorporates a proven and well tested conventional flow control system with a mechanical anti-hypoxic system ensuring maximum patient safety
- The Astra 3 *i* 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 the Cygnus 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 Cygnus has integrated oxygen monitoring and spirometry
- The Hydra carbon dioxide absorber with both "ventilator" and "bag" mode switching. It fits neatly onto the Astra 3 *i* and incorporates a quick release canister. The Hydra's 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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About OES Medical

OES Medical are based in Oxfordshire UK and are a world class designer and manufacturer of anaesthesia equipment and accessories for use globally.

The Company was established in 1995 and started as Oxford Engineering Services (OES) offering sub-contract services for the manufacture of high quality components for use in medical and acute care capital equipment.

Today OES Medical has significant expertise in the field of anaesthesia and has developed to the extent where it now designs its own equipment - moving on from sub-contract working to manufacturing own brand equipment for sale globally.

The Company is fully certified to CE and ISO Standards and is audited and accredited by the UK Notified Body SGS United Kingdom Ltd.

One of the main factors contributing to the success of the Company is the in-house manufacturing department with ten multi-tool CNC machines which have allowed all manufacturing of its anaesthesia equipment to take place on one site, making the products completely sourced and fabricated in the UK. An investment of in excess of £ 750,000 in machinery has ensured the high quality, consistent manufacture of all components at costs that ensure a competitive advantage over many larger manufacturers.

Due to an ever increasing workload and growing sales volumes the Company moved from existing premises in Abingdon, Oxfordshire to a new purpose built 18,000 ft2 factory in Standlake, North Oxford in 2013 to expand manufacturing and meet the growing global demand for its products.

Today the factory houses the design, manufacturing and assembly departments for the products in one location and ensures continuity of all processes required to produce safe, reliable British-designed and manufactured anaesthesia machines and associated accessories.

If required, the products can be supplied as modules for local assembly to allow customers to be competitive within their own market. This can be as simple as the supply of anaesthetic machine sub-assemblies for use in locally made frames or as complex as a license to allow manufacture of a complete product.

As a privately owned Company OES Medical retain the flexibility to be able to work closely and rapidly with their customers to ensure that they offer bespoke solutions to all requirements. OES Medical now sells equipment to in excess of 30 countries in North and South America, Middle East, Africa and Asia via a network of Distributors and OEM Customers.









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Astra 3 i Specifications

Cygnus 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 2 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 dispaly Case time with stop and reset facilities

Pneumatic Specification

1, 2 or 3 Station Selectatec (a) backbar with integrated pressure relief valve Selectatec (a) 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

Flowmeter Specification

2 or 3 gas flowmeter – Oxygen and Nitrous Oxide or 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 EFM (Electronic Flow Monitor) option available







OES MEDICAL CE⁰¹²⁰

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