



# The centerpiece of a comprehensive anaesthesia workstation

IntelliSave AX700 anaesthesia machine

# A slim design with rich functionality



The IntelliSave AX700 is a comprehensive anaesthesia machine from Dameca. With an impressive number of high-end features and advanced ventilation capabilities, the IntelliSave AX700 can support all patient populations and acuity levels. Its slim, ergonomic, modern design, and small footprint allow it to fit in areas where space is limited.

A range of additional features and options mean you can easily adapt the IntelliSave AX700 to the needs of your anaesthesia practice, today and in the future.



## Key advantages

- A platform ready to grow with your personal needs and advances in anaesthesia practice
- A compact, vertically-oriented integrated breathing system (IBS) that is easy to disassemble and reassemble for cleaning
- Space-saving design and ergonomic layout
- Touch screen user interface for intuitive and easy operation
- Electronic gas mixer for precise control and display of gas mixtures
- Optional Multigas Module to monitor O<sub>2</sub>, N<sub>2</sub>O, CO<sub>2</sub>, RR, and anaesthetic agents (with automatic agent identification)
- A high standard of built-in features

# Critical functionality

The IntelliSave AX700 is designed with critical functionality in mind.

The built-in battery backup utilises separate batteries for the user interface, gas mixer, and ventilator. This optimises battery use and provides up to 90 minutes of backup power in the event of an extended power outage.

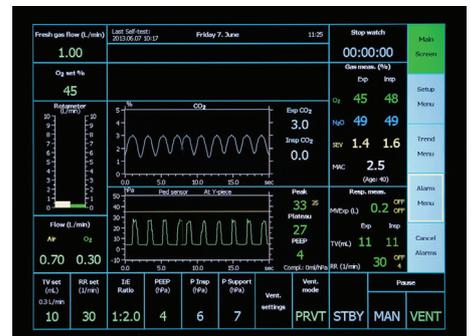
Even if the batteries are empty, you can continue to manually anaesthetise and ventilate your patient in virtually any situation as the emergency fresh gas flow and vaporiser remain operational. The electronic gas mixer, with a fresh gas flow of up to 20 liters per minute, has electronic flow meters presenting the flows of O<sub>2</sub> and air or O<sub>2</sub> and N<sub>2</sub>O.

## Other features include

- Adjustable, emergency fresh gas flow in addition to the fresh gas flow from the electronic gas mixer if desired: immediately add up to 15 L/min of O<sub>2</sub> to the electronic fresh gas mixture.
- A switch redirects the fresh gas flow to the auxiliary fresh gas outlet for rapid switching between the IBS and an external breathing system
- Quick access to supplementary oxygen through an external auxiliary oxygen flow meter
- Fast, semi-automatic self-test at start-up
- In case of an emergency, the self-test can be easily bypassed

## Ventilation capabilities

A wide variety of ventilation modes allows you to match the ventilation requirements of patients from neonatal to the elderly. This includes PRVT\* (Pressure Regulated Volume Target), a lung-protective ventilation mode that combines the advantages of Volume Controlled Ventilation (VCV) and Pressure Controlled Ventilation (PCV). PRVT\* continuously adjusts the inspiratory pressure based on the compliance and resistance of the patient's lungs and airways, to maintain pressure at the lowest possible level while providing the preset tidal volume. This provides optimum gas exchange and subsequent oxygenation during surgery.



## Caring for your smallest patients

The optional Neonatal software combined with PRVT\* can achieve tidal volumes down to 10 mL and allows you to control these tiny volumes in increments of 1 mL.



## Ventilation modes

- Volume Controlled Ventilation (VCV)
- Volume Supported Ventilation (VSV)
- Synchronized Intermittent Mandatory Ventilation (SIMV)
- Pressure Controlled Ventilation (PCV)
- Pressure Supported Ventilation (PSV)
- Pressure Regulated Volume Target (PRVT\*)

\* Option

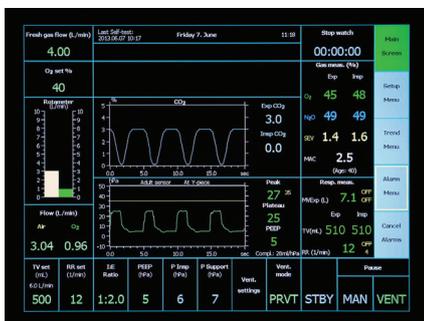
# Convenience by design

Applying our extensive knowledge of anaesthesia workflow and the ergonomics of the anaesthesia workspace, we have grouped the controls and indicators for intuitive and fast access. Similarly, the 15" colour touch screen's structure is easy to understand and navigate. The screen also displays measurements from the optional Multigas Module.

The ease of use starts well before you turn the machine on.

The IntelliSave AX700 is compact in size and easy to maneuver – helping it fit even in operating rooms where space is limited. It also helps you stay organised with two large drawers, and a tabletop with an extendable work surface. It has an adjustable LED light to illuminate the work surface without distracting the surgeon.

Despite its slim design, the IntelliSave AX700 includes several key features as standard – such as an anaesthetic gas scavenging system (AGSS) for gas evacuation, and a patient suction device. These remove the need to have separate devices beside or behind the machine.



The anaesthesia machine can be delivered with a manifold/back bar for various vaporisers. It has mounting interfaces for patient monitors and a second display (for the patient monitor or an anaesthesia information management system) to add flexibility without adding unnecessary bulk.

## Getting to work

Setup is simple too. Focus your time on your patient, rather than on connecting multiple tubes between the anaesthesia machine, breathing system, and patient. Our vertically integrated breathing system (IBS) combines an ascending bellows, breathing system, and CO<sub>2</sub> absorber in one compact unit. That means no tubing between the IBS and the machine.

- **Moisture-tolerant integrated breathing system**

The vertical design of the IBS, together with the construction of the absorber canister, allow excess moisture to condense and flow down into the bottom of the container.

- **Workflow-oriented CO<sub>2</sub> absorber**

The i-SORB CO<sub>2</sub> absorber canister can be easily replaced during a procedure without causing disruption to anaesthesia delivery. The absorber is available in reusable or disposable versions.

- **A close watch over your patient**

The IntelliSave AX700 gives you the opportunity to choose where to measure the flow. The flow sensor can be placed either at the expiratory cone or close to the patient for near measurements.



Once turned on, the ventilator automatically compensates the tidal volume for the impact of the fresh gas flow and system compliance. The vertical yellow inspiratory and expiratory valves provide visual indicators to help you confirm correct function. In addition, the Adjustable Pressure Limiting (APL) valve is conveniently located for easy access.



### Easy to maintain

Smooth surfaces on the IntelliSave AX700 support easy cleaning and are designed to help you get ready for the next patient. The integrated breathing system (IBS) can be taken apart for cleaning in less than 60 seconds.

The unambiguous design also avoids reassembly errors.

The ease of maintenance is further enhanced by long intervals between preventive maintenance (once a year).



## Working together to make a difference

The IntelliSave AX700 anaesthesia machine supports a wide range of anaesthesia-specific patient monitors with anaesthesia-specific features and configurations, and measurement parameters relevant for anaesthesia – such as EEG, Bispectral Index and neuromuscular transmission (NMT). You can mount these monitors on the left of the IntelliSave AX700 to keep cables short, and to provide easy viewing when attending to the patient.

There are also alternatives for mounting a second display on the right. This could be a second monitoring display – or it could be an anaesthesia information management system for documentation and decision support.

A data communication interface (available through the optional SmartLog communication port) lets you include data from the anaesthesia machine with other relevant patient information on the patient monitor display, or to communicate data to other hospital IT systems.

## Technical Specifications

Dimensions (H × W × D)	1550 × 810 × 790 mm
Weight	150 kg
Fresh gas flow	Electronic flow meters and flow control Total flow range: 0.2–20 L/min
Vaporizers	Manifold/back bar for two Selectatec or other vaporisers with interlock safety mechanism
Integrated breathing system (IBS)	Combines the ascending bag-in-bottle, breathing system, and CO <sub>2</sub> absorber in one vertical arrangement  Fresh gas enters after the inspiratory valve
Absorber capacity	Volume 1420 mL Capacity of approximately 880 g soda lime
Tidal volume	10 to 1500 mL (PRVT* and Neonatal software) 20 to 1500 mL (VCV)
Respiration rate	4 to 80 bpm
I:E ratio	3:1 to 1:9.9
PEEP	4 to 20 hPa / cmH <sub>2</sub> O / mbar
Inspiratory pressure	PCV mode: 4 to 67 hPa / cmH <sub>2</sub> O / mbar PSV mode: 4 to 50 hPa / cmH <sub>2</sub> O / mbar
AGS System	30 to 40 L/min
Ventilation measurements	Peak, Plateau, and mean pressure, PEEP, patient compliance, tidal and minute volume, spirometry loop including pressure and flow waveforms
Integrated Multigas Module	Up to two anesthetic agents (with automatic agent identification), CO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> O, respiration rate

Dameca A/S develops, manufactures and sells innovative anaesthesia machines to the world market and is found in more than 100 countries. Our product portfolio also includes flow meters, suction units, wall panels and other OR/ICU and ward supplies.

Dameca is a company of the Löwenstein Group.

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