

GE Healthcare

Et Control

for the Aisys Carestation

Simplified Automation



Focus on what matters most

The anesthetist's job is both art and science — a fluid blend of expertise and hard data, all aimed at tailoring the optimal anesthesia plan for each patient.

Anesthetists spend valuable time checking and re-checking EtO₂ and EtAA values, adjusting O₂ and agent settings, re-adjusting for changes in uptake and metabolic rate, to ensure safe and effective anesthesia. All this in parallel with a multitude of other time-consuming and complex tasks.

There is no question that digital technology can help eliminate many of the time-consuming manual processes involved in agent and gas delivery as well as patient monitoring.

The question is 'how'?

How can EtO₂ and EtAA levels be monitored and regulated safely, reliably, and cost-effectively by digital technology? How can anesthetists reduce tedious and redundant tasks, without relinquishing control and without jeopardizing the quality of patient care?

GE Healthcare has the answer.

Et Control: Tailored Anesthesia through Simplified Automation



Et Control: Simplified Automation

Et Control is an optional gas delivery mode for the fully digital Aisys® Carestation® from GE Healthcare. With Et Control the clinician sets the target EtO₂ and EtAA values, the system constantly monitors the patient's EtO₂ and EtAA values and automatically adjusts the gas delivery and total flow to achieve and maintain the set target values. Intelligent inbuilt safeguards protect against over-delivery and under-delivery of agent and hypoxia – while providing the clinician with peace of mind and total control at all times.

This innovative approach provides tangible benefits to the anesthetist, including:

Sophisticated safety features

Et Control constantly measures end-tidal values and automatically adjusts for the patient expired fractions, so inputs can be tailored with extreme precision to achieve the desired result. This level of precision significantly reduces potential over-delivery of agents. In addition to protecting against over-delivery of agents, Et Control provides an intelligent hypoxic guard that ensures alveolar oxygen is always above 25%, especially important during circle anaesthesia. Traditional hypoxic guards only regulate the oxygen in the fresh gas and not in the circle breathing system. Now, GE Healthcare has set a new safety benchmark for circle anesthesia with EtO₂ Control.

Simplicity and ease of use

Et Control can be used by any clinician familiar with the GE Healthcare anesthesia machine range. Simply set the EtO₂ and EtAA target values and Aisys takes care of ensuring those targets are met. For further peace of mind when in Et Control, the user can also select a total minimum fresh gas flow, to disallow total fresh gas flows lower than the minimum setting. Et Control can give higher total flows than the minimum flow setting (typically in response to big changes to the EtO₂ and EtAA target settings) but it will never go below the minimum total flow setting.

Reduced workload

Automated EtO₂ and EtAA regulation and monitoring, Et Control relieves the clinician of tasks that are not only tedious and time-consuming but also potentially distracting, to positively impact the overall patient care process.

Reducing costs

With increasing economic challenges, Et Control provides a tool to deliver low-flow anesthesia in a safer and controlled way, minimizing fresh gas and anesthetic agent usage, with a positive impact on costs.

Data integration

Et Control captures and stores patient data seamlessly. Used in conjunction with data supplied by other elements of the Aisys Carestation, such as the digital ventilator, vaporizer, gas mixing/delivery system, Et Control is an integral part of a holistic patient management system. The information flow among these core subsystems enables critical information to be compiled and transmitted, with built-in redundancies, to provide data continuity.

Practice change made practical

The combination of control, safety, ease of use, and efficiency make the Aisys Carestation with Et Control a compelling option for all hospitals that are choosing advanced capabilities in user-friendly systems. Et Control is a powerful catalyst for making the move to integrated Carestations for Tailored Anesthesia and for choosing the Aisys Carestation.

Future proof system

GE Healthcare has been growing with you developing a fully upgradeable anesthesia platform. The Aisys Carestation is a fully digital anesthesia delivery system featuring digital ventilator, vaporizer, gas delivery and data integration technologies. Aisys was specifically designed to be at the forefront of new product enhancements from GE Healthcare to adapt and grow with you as anesthesia technology and clinical needs change.

Et Control is tangible proof that Aisys is an evolving, future proof and upgradeable platform – which makes it a safe investment – exactly as we said it would be.

As a fully digital system, Aisys gives us enormous scope to develop and add clinically relevant features that increase clinical performance. End-tidal Control is just one example of this and an example of our ongoing commitment to our customers.

Et Control is an optional upgrade to the Aisys Carestation, so existing Aisys Carestation customers can exploit the powerful new tailored anesthesia capabilities, quickly and cost-effectively, without an equipment change and not be left behind.



More about the Aisys Carestation

Aisys simplifies and integrates advanced technologies, including sophisticated anesthesia therapy, advanced patient monitoring, clinical decision support tools, and information management systems into an interactive, knowledge-based system. Aisys delivers:

Clinical excellence through patient-focused care. The Aisys Carestation helps you deliver unmatched performance through patient-focused care.

Proven clinical excellence. Aisys provides superior ventilation and a full range of vital signs monitoring; it is flexible to accommodate a broad range of patients, from neonates to the morbidly obese.

ICU ventilation performance, by design. Our Smartvent 7900 ventilator utilizes high performance, microprocessor controlled, pneumatic flow control valves, as found on high-end intensive care ventilators. In combination with our Advanced Breathing Circuit (ABS), we offer exceptional ventilation performance for your clinical needs, today and for the future.

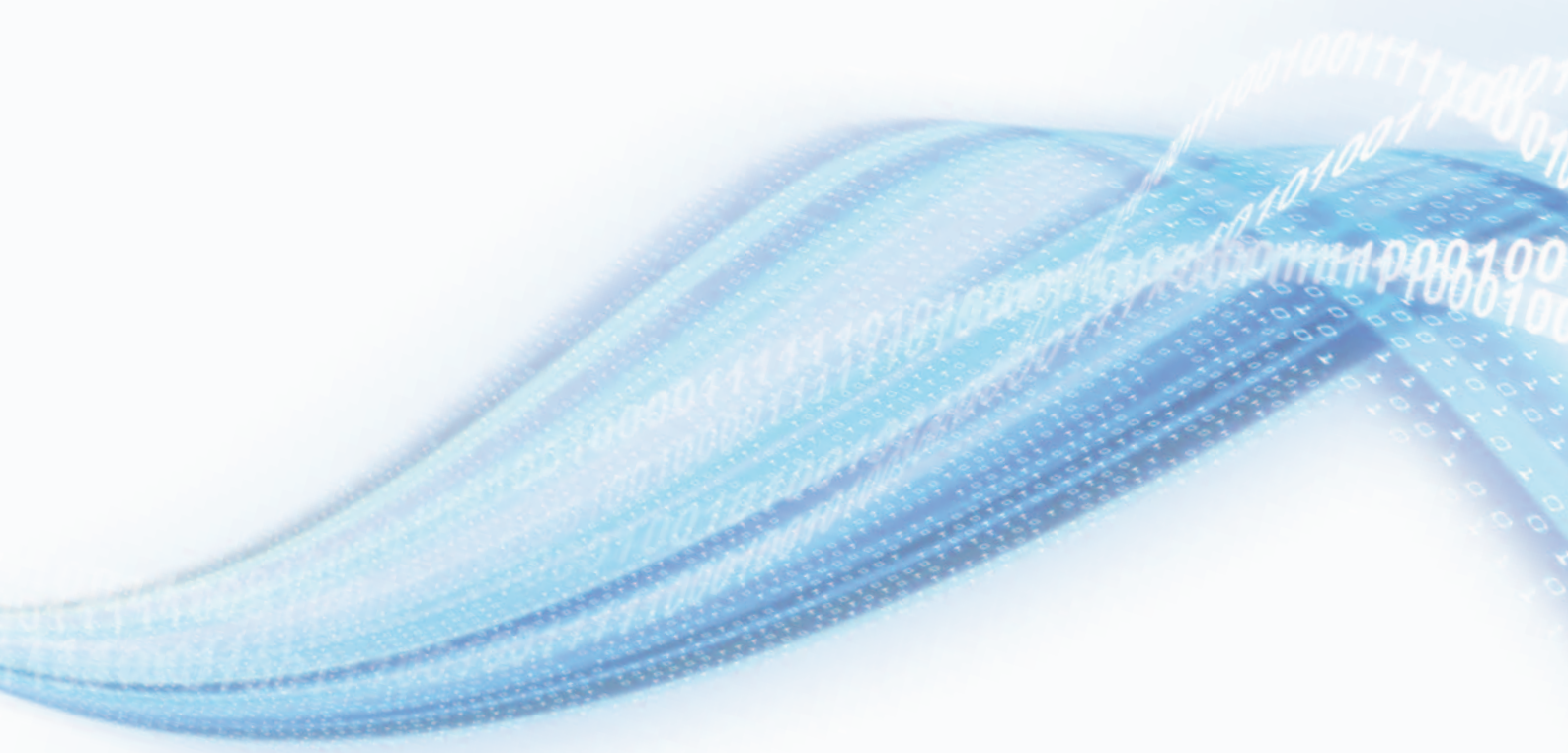
INview patient displays. Our exclusive INview Patient Displays give you the flexibility to position the patient monitoring, ventilation data, and system controls right where you need them. The INview displays are mounted on the movable INview arm, to provide with 360° of rotation to aid clinical workflow.

An ideal solution for low flow cases. Our integrated Advanced Breathing System (ABS™) provides a low volume breathing circuit for fast-response times to changes in fresh gas composition and agent settings – specifically designed for low-flow anesthesia. The rising microprocessor-controlled, multibreath bellows also provides immediate visual feedback about the patient's status.

Cost efficiencies. Gas and agent consumption measurements help you track usage and capture costs. Combined with our clinical information systems, the Aisys Carestation helps you assess costs and improve efficiencies.

Continuous Innovation for Constant Improvement in Patient Care

Et Control for the Aisys Carestation is aimed at one overarching goal: optimal outcomes for patients through continuous innovation in technology. Learn more about our offerings for Tailored Anesthesia by visiting <http://www.gehealthcare.com/euen/anesthesia/index.htm>, or contact a GE Healthcare representative today for a demonstration of Et Control for the Aisys Carestation.



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About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world.

GE Healthcare
P.O. Box 900, FIN-00031 GE, Finland
Tel. +358 10 394 11
Fax +358 9 146 3310

www.gehealthcare.com



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