Be prepared for every journey

Anaesthesia Drug Delivery
Preparing you for the most pressing challenges

Whether you practice inhalational anaesthesia, intravenous anaesthesia or regional anaesthesia, it is important to optimize the delivery of the volatile, hypnotic, and opiate drugs to the patient. GE’s anaesthesia drug delivery solutions are specifically designed to assist you with this vital task.
End Tidal Control** helps maintain patient’s end-tidal agent and oxygen settings. Regardless of changes in patient’s hemodynamic and metabolic status, agent and oxygen levels are automatically adjusted to targeted end-tidal levels.  

**End Tidal Control**  
**Target control for volatile anaesthesia and patient oxygen**  

End Tidal (Et) Control** helps maintain patient’s end-tidal agent and oxygen settings. Regardless of changes in patient’s hemodynamic and metabolic status, agent and oxygen levels are automatically adjusted to targeted end-tidal levels.  

**Precision and safety**  
Et Control** continuously adjusts according to your patient’s uptake, while end-tidal oxygen is maintained at 25% or higher  

**Agent delivery optimisation**  
Et Control** helps optimize end-tidal oxygen and agent levels delivered  

**Target control made simple**  
We didn’t invent volatile TCA... but we got it right  

**Potential to reduce your costs**  
When Et Control** is enabled at its default settings it may lower agent consumption due to reduced flow rates
Innovation and performance by design

**Digital Gas Delivery**
Digital control of the electronic gas mixer is a cornerstone of End Tidal (Et) Control**

**Digital Vapourizer**
Maintenance-free vapourisers with digital vapour delivery to optimise agent delivery, reduce agent wastage and reduce environmental pollution

**Advanced Breathing System**
Exceptional breathing circuit kinetics enables rapid wash-in and wash-out profiles to optimise agent and oxygen delivery

Time to reach the target concentrations are statistically significantly shorter with Avance® than with Primus® on all saturation and washout profiles2.

Aespire®, Avance and Aisys® utilize the same ABS 2.7 litre breathing circuit.

Avance, with a reduced volume breathing circuit (2.7 litres versus Primus’ 4.5 litres) mainly through excluding manual circuit (balloon gas mixer) during mechanical ventilation; moreover tubular geometry of the breathing circuit generates less turbulences and allows faster sevoflurane saturation and washout3.
Adequacy of Anaesthesia (AoA) concept

Helping you deliver tailor-made anaesthesia to each patient

Adequacy of Anaesthesia (AoA) concept signals GE Healthcare’s commitment to provide clinical measurements for the components required for general anaesthesia. These measurements help the clinician deliver tailor-made anaesthesia to each patient.

- **Entropy**: Monitoring the state of the brain by data acquisition of electroencephalograph (EEG) and frontal electromyograph (FEMG) signals.
- **Surgical Pleth Index**: Monitoring the patient’s responses to surgical stimuli and analgesic medications, based on readily available pulse oximetry signals.
- **Neuromuscular Transmission**: NMT is the transfer of an impulse between a nerve and a muscle at the neuromuscular junction. Our module provides quantitative, automatic measurement of muscle response to stimuli.
- **Hemodynamic Parameters**: Monitoring different hemodynamic parameters can help protect the patient from excessive hemodynamic changes and maintain autonomic stability.
The Surgical Pleth Index (SPI)** is a parameter that reacts to hemodynamic responses caused by surgical stimuli and analgesic medications. SPI** is based on the plethysmographic waveform amplitude and pulse interval. The SPI** measurement is to be used for unconscious and fully anaesthetised adult (>18 years old) patients during general anesthesia.

SPI** was found to have a significant correlation with the amount of remifentanil and reacted to painful events.

SSI [SPI]** values were lower in patients with plexus block covering the sites of nociceptive stimuli, SSI had better performance than heart rate, BP, or Response Entropy.

SPI** was found to correlate with the changes of opioid delivery better than RE, SE, HR or PPGA. However, it was not affected by changes in the delivery of hypnotics.

SPI** is an index that changes when the patient reacts to painful stimulation or opioid delivery during general anaesthesia. SPI** varies from 100 (high reactivity) to 0 (no reactivity) and may help the user assess the nociception-antinociception balance of the patient.

SPI** Compatibility
- CARESCAPE Monitor B850 (OR software and SPI** license)
- CARESCAPE Monitor B650 (OR software and SPI** license)
- An SpO2 measuring module with GE (Ohmeda) technology (E-PSM, E-PSMP, E-PRESTN, E-RESTN)
- Finger sensor for SpO2 (reusable or disposable)
Predictive drug modeling, including synergistic interaction with total drug effect display that can support you in optimizing patient management based on your clinical judgment.

The Navigator Therapy display provides a tool for helping you visualise PK/PD models for commonly used anaesthetic (inhaled and IV) drugs.

The calculated effect site concentrations are displayed in a time based graphical format. The combined ‘total effect’ trace (black line shown in the sedation and analgesia windows), visualizes the combined synergistic effect of the analgesic and sedative drugs.

The drug models are calculated for up to one hour into the future providing predictive drug modeling for effect site concentration and quantifying complex drug interactions.

Note: The drug concentrations and effects shown are based on published models and do not represent actual measurements from the patient.
Venue 40 Ultrasound

Once you use it, it's hard to imagine working without it

Venue 40 is exceptional image quality in an intuitive and affordable system for ultrasound-guided regional anaesthesia and vascular access. Designed to move easily, fits into tight spaces, and make cleaning fast and easy. Venue 40 - What's next has arrived!

- Image Quality
- Ease of Use
- Portability
- Cleanability
- Data Management
Platformed by Design

Scaleable-platformed anaesthesia delivery solutions

Platformed display, platformed ventilation modes, platformed safety features, platformed user interface, platformed parts and servicing.

An anaesthesia portfolio tailored to your needs with no compromise on performance. Aisys with End Tidal Control is further evidence of an upgradeable platform for today, tomorrow, and beyond.

Aisys Carestation
Avance Carestation
Aespire View
We believe an innovative idea can achieve transformational results. GE now offers an exceptionally broad selection of patient interface solutions and services, regardless of your care area. Our combined product portfolio provides the technology, tools and services you demand. It also provides the solutions to support patient care that help drive positive outcomes, while providing the right connection for your patient in the operating environment.

GE for Anaesthesia

100 years of anaesthesia product innovation. Manufacturing and R&D facilities in Europe, the US, China, and India. Sales, service, and support in 100+ countries.
1 GE Healthcare 2009 clinical trials, Helsinki University and Kiel University
2, 3 Comparison of Saturation and Washout Kinetic Profiles for Sevoflurane in Two Ventilators: Bertrand Basset et al, ASA Abstract 2008; A782
† SSI, or Surgical Stress Index, was the first working name for the measurement. Therefore, this name may come up in some of the first research references. Surgical Pleth Index is a GE Healthcare parameter that is currently not available for sale in the United States.