GE Healthcare

S/5 Avance® Carestation

Innovating with you,
shaping exceptional care

Clinician inspired perioperative solutions

GE's Avance Carestation® was developed using Datex-Ohmeda's unique approach to perioperative solutions – close and continuous collaboration with clinicians. With you as our guide, we designed a compact, integrated anesthesia carestation that combines our highly advanced anesthesia delivery, the very best in anesthesia patient monitoring, and care information management. By combining these care elements with our supplies and services, we deliver an essential component of your integrated perioperative solution.

Simply the best anesthesia ventilation

You asked for sophisticated ventilation capabilities that help you meet the needs of the full patient range. The Datex-Ohmeda Avance satisfies your request with the 7900 SmartVent™ ventilator. Ventilation capabilities include: Volume Control, Pressure Control, PSVPro, SIMV (Volume and Pressure), and manual ventilation.

The SmartVent uses a similar gas delivery system to that found in most critical care ventilators, yet has been adapted specifically for anesthesia applications and is easily controlled via our intuitive Datex-Ohmeda user interface.

The SmartVent's latest modes, Synchronized Intermittent Mandatory Ventilation (SIMV) with Pressure Support and PSV-Pro® (Pressure Support with Apnea backup mode), expand the clinical capabilities of the Avance to help meet the needs of your patients. With an adjustable flow trigger, electronic PEEP and an apnea backup mode, the SIMV and PSVPro modes help simplify the work of caring for your spontaneously breathing patients. Pediatric patients, patients with laryngeal mask airways (LMAs) and those that cannot tolerate certain anesthetic agents are examples of persons that will benefit from the use of these modes.

Setting the standard for electronic gas mixing

Incredible response time and accuracy provides you with the ultimate in fresh gas control and efficiency.

- Low flow anesthesia supported: minimum gas flow of 150 mL/min.
- 500 millisecond mixer response time – even for dramatic flow changes. This allows you to deliver exactly what you want, exactly when you want it.
- Since the mixer delivers fresh gas directly to the inspiratory port on your command, there is no fresh gas or agent wasted to "charge the circuit". This facilitates low flow clinical practices – even when changing from very high flows to very low flows.
- Intuitive and fast setting of fresh gas flow mixture makes using our state-of-the-art gas mixer easy.
- Dual flow sensing technology helps ensure safe operation. Gas flow is checked 200 times per second to insure the carestation is delivering the proper blend based on your setting.
- Electronic cylinder pressure sensing technology alerts you when cylinders are low.
- Alternate O_2 control provides an independent fresh gas source and flow meter control when required – helping you to support your patient under unforeseen conditions.

Advanced Breathing System (ABS)

The Avance comes equipped with our Advanced Breathing System, the ABS™. Its design, based on your needs and our expertise, is fully integrated into the carestation.

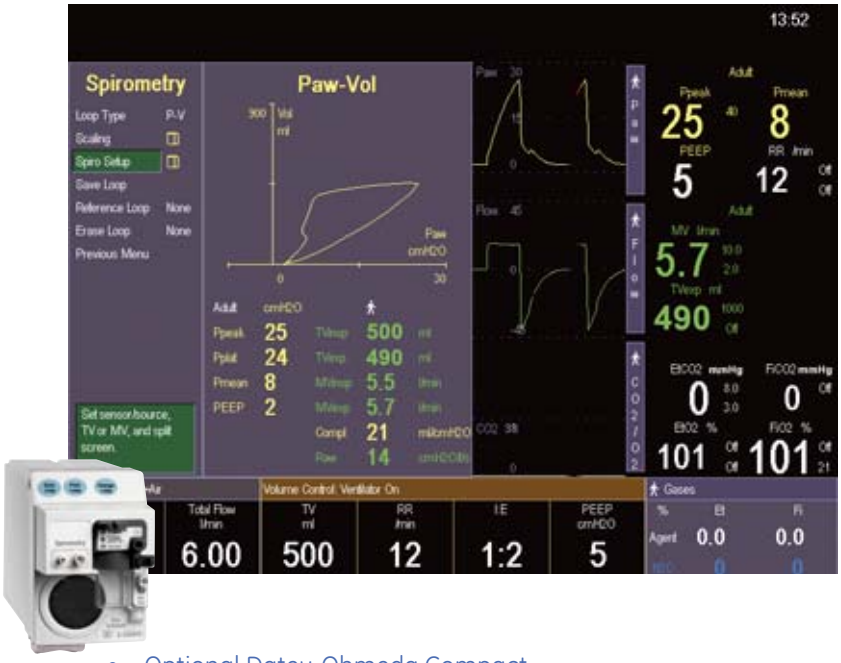
- Fewer parts and connections reduce the potential for leaks and misconnects, helping to provide greater patient safety.
- Our Multi Absorber canister facilitates fast, easy removal and replacement.
- Fully autoclavable.
- Choice of gas scavenging options helps provide compatibility with your existing waste gas system.
- Easy on/off capability and no tools disassembly of the ABS facilitates easier cleaning and reduces maintenance time.

Enhancing your productivity

Special features of the Avance make it easy to use and enable you to focus more attention on your patient.

- System checkout is fast and intuitive, with full-color photo images to illustrate each step and confirmation tones when each test is complete. A real-time clock displays time to complete each test and the date and time it passed.
- Patient trends can be displayed in three views: measured (numerical), settings, and graphical. Measured and settings data is saved every five minutes for the most recent 24 hours. Graphical data is saved every minute for the most recent 24 hours.
- Quick Keys let you easily change O_2 and total flow settings. You can use Vent Setup keys to enter and change multiple settings and one button to confirm them.
- You can press any Gas or Vent key to take the machine out of standby and initiate gas flow to start the case, essential for emergency cases.
- An 8-second power-down delay protects against accidental shutdown during a case.

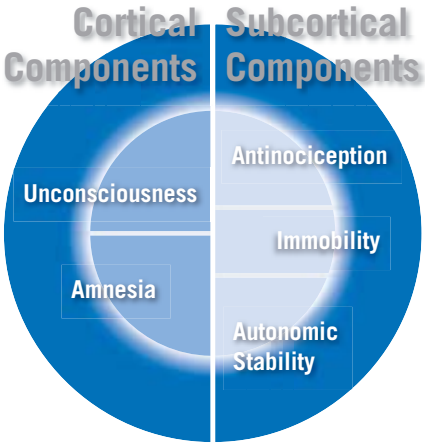
Patient Spirometry™ measures airway pressures, flow, volumes, compliance and airway resistance breath by breath. On the Avance ventilation screen, the spirometry information is displayed as graphical loops, which may help you detect leaks or obstructions in the airway and adjust optimal ventilator settings. Because the spirometry loops are saveable, Patient Spirometry offers you an intuitive tool for detecting changes in the patient's ventilatory status.



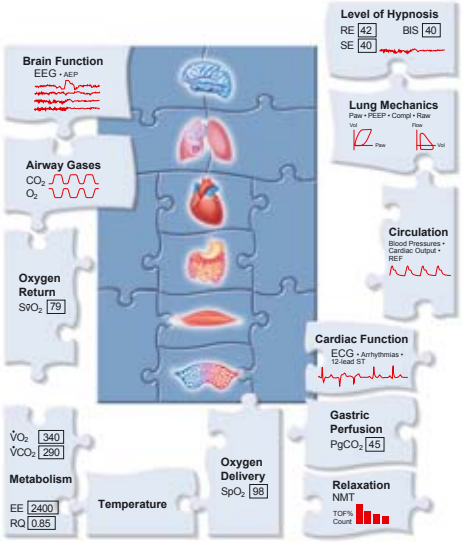
- Optional Datex-Ohmeda Compact Airway module can be physically integrated into Avance for Patient Spirometry
- Airway gases CO_2, O_2 and N_2O and anesthetic agent measurement with automatic identification
- Patient Spirometry measured at the patient's airway as shown on the Avance ventilation screen
- A complete and integrated picture of your patient's ventilatory status

Patient monitoring made easy

The Datex-Ohmeda Anesthesia Monitor gives you the time and freedom to monitor your patient effectively. It offers what you need for effortless patient monitoring in the OR and beyond – a full range of monitoring parameters, intuitive use, modular configurability, transparent device integration, and data transfer.



The eye on anesthesia signals our commitment to providing you with the best and most complete range of clinical parameters to address the Adequacy of Anesthesia. It will also help to understand various components of anesthesia, specific effects of anesthetics, as well as drug interactions.



Datex-Ohmeda anesthesia monitoring offers a variety of unique clinical concepts and a full range of parameters. Its modularity makes it highly adaptable in virtually every clinical situation.

The most complete Anesthesia Monitor

The Datex-Ohmeda Anesthesia Monitor, incorporates the vital parameters for anesthesia. In addition to the standard measurements the modular system is expandable for more demanding operations with special needs. The flexible modular frame allows implementation of future enhancements.

The latest addition to the range of clinical parameters is the Entropy technology for monitoring the effects of certain anesthetics on the central nervous system of your patient. Combining the information gained by entropy and the rest of the adequacy of anesthesia parameters, like hemodynamics and neuromuscular transmission, helps give you full understanding of the state of your patient.

Haemodynamic monitoring

- Standard haemodynamic measurement of ECG, NIBP, up to six invasive blood pressure channels, temperature, SpO_2 and respiration rate
- SvO_2, C.O. and SpO2 technologies with oxygenation and haemodynamic calculations give a thorough view of your patient's haemodynamic status

ECG and ST analysis

- Up to 12-lead ECG with multi-lead arrhythmia analysis
- Viewing, printing and adjustable ST alarm settings for anterior, inferior and lateral lead groups
- Sophisticated Ischemic Burden view for easy and accurate visualization of patient's ischemic events

Level of hypnosis

- Entropy® monitors the effects of certain anaesthetics on the patient's central nervous system
- Response Entropy shows the reactivity of the patient's, State Entropy the hypnotic state of cortex
- Helps to avoid unnecessarily deep anaesthesia and to prevent unexpected recovery

Neuromuscular transmission

- The NMT module measures the patient's individual response to nerve stimulation and regional block
- Continuous hands-free measurement with automatic trending and recovery note
- All simulation modes (TOF, DBS, ST, PTC) to optimize the patient's level of neuromuscular block

EEG

- A sensitive tool for monitoring the neurophysiological status of the perioperative patient
- Up to four channels of continuous measurement and spectral EEG with trending
- Auditory Evoked Potential (AEP) measurement for brainstem and mid-latency responses

Integrated solutions designed to enhance your care

Our constant cooperation and interaction with clinicians allows us to continuously refine and improve our user interface capabilities and identify valuable integration benefits. We recognize that making our carestations easy to use is absolutely one of the most important aspects we can provide to you and your practice.

Unique ergonomic advantages

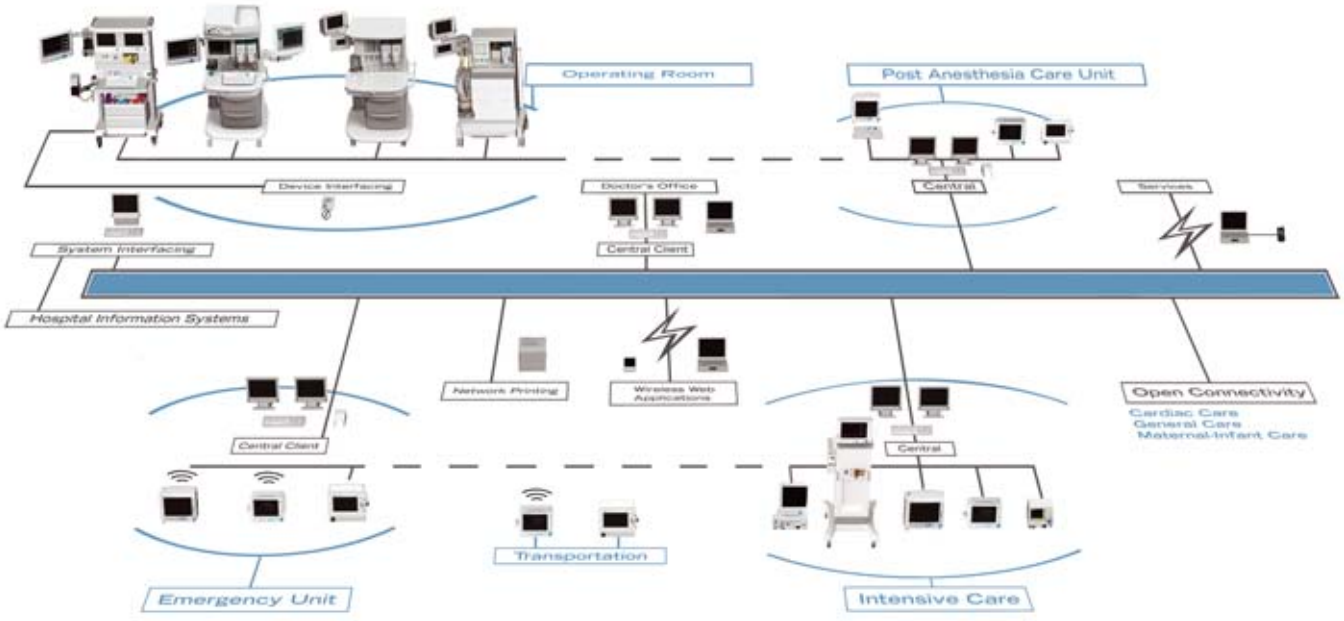
- Heralded Datex-Ohmeda user interface shared with all components of the carestation
- Consistent menus, quick key actions and alarm manage ment help minimize the need for training and reduce complexity during critical and non-critical events
- One switch power up for the entire carestation
- Flexibility with different display options for monitored data
- Extra large work surface area – space to meet your needs
- LED light strip provides bi-level work surface illumination
- Mains electrical surge protection and battery backup provide operation capability even under abnormal power conditions

Support in decision making

- By combining the set and measured inspiratory and expiratory gas values on the same full-color, 12 inch ventilation screen helps make the administration and control of gases delivered to the patient logical and easy to use
- Sophisticated, yet simple alarm management provides you with intelligent information when you need it most
- Help screens provide you with immediate assistance
- Strong commitment to enhancing the Avance's ability to provide decision support through intelligent parameter interaction

Anesthesia documentation

- Centricity Anesthesia is an open, modular anaesthesia solution providing a continuum of patient data throughout the anaesthesia workflow.
- Deio Anesthesia shares the Datex-Ohmeda anaesthesia monitoring user interface and hardware platform. It therefore provides an excellent solution for customers who already own Datex-Ohmeda monitors and are familiar with their operation. Like Centricity Anesthesia, Deio Anesthesia provides tools covering the entire anaesthesia process.



Information at the point of need

The **iCentral** suite of applications off ers scalable networking, viewing, storing and exporting of all patient data. It provides real-time waveforms, numerical data, alarms, vital signs, trends, event history with snapshots and full disclosure – all logically organized into cardiac, haemodynamic, ventilation and neurological views. Using iCentral, consultation and remote surveillance are easier when the same, complete information is available simultaneously in all departments, offi ces and other care locations.

iConnect solutions include iCollect, a valuable research tool for professionals that provides an easy and efficient way to collect all data from iMM monitors; iDIS (Device Interfacing Solution) allowing interfacing of external medical devices to iMM monitoring; and iGate, a communication platform to hospital information systems supporting standards developed specifi cally for the healthcare domain, such as HL7.

iPON solutions help clinicians capture and share vital information whenever and wherever they need it. iPOC – information at the point of care – makes it easy to navigate a wealth of clinical information, giving care providers bedside access to various information sources like laboratory results, patient demographic data and image access, while also offering the possibility to run other clinical information systems applications. Complementing iPOC are Cellular Viewer, Pocket Viewer and Web Viewer, which allow real-time information access from both within and outside of the hospital.

The decisive difference

Supplies and accessories are not born equal, whether in design, quality or price. Our original Supplies & Accessories are designed and validated specifically for our equipment. They make a decisive difference to your operation by ensuring:

- Constant availability and lifetime support
- Compatibility
- High quality – tested and valitated
- Accurate measurements
- Ease-of-use – true ergonomic design
- Excellent value

For more than 100 years, scientists and industry leaders have relied on General Electric for technology, services and productivity solutions. So no matter what challenges your healthcare system faces – you can always count on GE to help you deliver the highest quality services and support.

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