Raising standards through innovation

Siesta i TS anesthesia machine

PHILIPS
sense and simplicity
Strong technology with a slim design

The Siesta i TS brings to healthcare one of the most innovative anesthesia machines on the market. Through listening to hospital staff, co-operating with software developers and applying our own broad expertise, we have come up with a machine to satisfy all needs - and more.

The first special feature to meet the eye is the slim, Scandinavian design. Put the Siesta i TS to work, and the many other benefits quickly come to light:

• Continuous platform development
• Long lifetime at low total cost of ownership
• Integrated breathing system (IBS)
• User-friendly touch screen
• Microprocessor-controlled ventilator with eight ventilation modes incl. PRVT*
• Electronic gas mixer and optional multigas monitor
• High-level safety features
• Space-saving design

Responsive, reliable and endlessly flexible, the Siesta i TS is a strong, easy-to-use solution in every operating theatre.

High-level safety features
You and your patients depend on the reliability of our machines. For that reason, the Siesta i TS has a number of built-in safety features, including:

• An emergency fresh gas flow switch
• A fresh gas flow switch between the integrated breathing system (IBS) and the auxiliary gas outlet
• An oxygen flow meter with separate outlet, including tube nipple
• Integrated patient suction unit
• Slave regulator in the hypoxic guard function to cut off nitrous oxide and give an audible alarm in case of a failed oxygen supply
• Fast automatic self-test at start up to ensure the machine is working optimally
• Built-in battery backup

Space-saving design
The slim, modular Siesta i TS is a compact choice for all operating theatres, where it occupies a minimum of space. Twin wheels enable the machine to be moved around smoothly and easily. Where floor space is particularly limited, our pendant and wall-mounted solutions are a practical alternative.

We have done our best to integrate all functions in the machine. Even the AGSS for gas evacuation is among the core functions, eliminating the need for a separate system on the side or rear of the machine.

A smart back bar for mounting Selectatec vaporizers and simple mounting of all types of patient monitors adds to the flexibility that will take the Siesta i TS into the future.

* option

Continuous platform development
Our commitment to ongoing innovation ensures our technological platform is continuously improved - and always equipped to satisfy the most demanding users.

Through our use of the most up-to-date, open standard technology, our electronic user interfaces are already prepared for the integration of healthcare equipment in hospital networks.

Long lifetime at low cost
Look forward to the lowest total cost of ownership on the market. Minimum maintenance requirements and easy cleaning are all part of our design. Consumable orders are also promptly handled and dispatched.

To make sure your Siesta i TS keeps up its optimum performance, ask about our tailored service packages.
Advanced anesthesia technology

User-friendly TFT color touch screen
The 15” TFT color touch screen is easy to read and easy to use. Use it to select ventilator and gas mixer settings. All data from the ventilator, gas mixer and optional multigas monitor are available at a glance. An optional printout of trend data and the amount of anesthetic agent consumed is available to help operators optimize usage. Software upgrades can be performed with the aid of a laptop computer.
Microprocessor-controlled ventilator

Our ventilator compensates for changes in the fresh gas flow and ensures compliance in the breathing system. Pressure and spirometry data are clearly displayed on the touch screen. The eight ventilation modes are:

- Volume controlled ventilation (VCV)
- Pressure controlled ventilation (PCV)
- Synchronized intermittent mandatory ventilation (SIMV)
- Pressure support ventilation (PSV)
- Volume support ventilation (VSV)
- Pressure regulated volume target (PRVT)*
- Manual
- Spontaneous

PRVT—Pressure Regulated Volume Target

PRVT is a lung-protective ventilation mode that combines the advantages of volume controlled ventilation (VCV) and pressure controlled ventilation (PCV).

Optimum ventilation is achieved through inspiratory flow control, maintaining inspiratory pressure while the patient is under anesthesia. The required tidal volume set by the operator is achieved by automatic, breath-by-breath pressure regulation.

Electronic gas mixer

With a capacity of up to 20 litres a minute, the gas mixer includes electronic rotameters for oxygen, nitrous oxide and air — an automatic interlock safety mechanism preventing simultaneous dosage of air and nitrous oxide. Thanks to our reliable hypoxic guard system, the oxygen/nitrous oxide mix will always contain minimum 25% oxygen. In addition the electronic gas mixer features:

- Heart-Lung Machine mode (HLM)*
- Neonatal ventilation*—tidal volume down to 10 ml in PRVT mode
- SmartLog*—an electronic patient progress recorder

Multigas monitor

The multigas monitor is available as an option for continuous measurement of oxygen, nitrous oxide, carbon dioxide, respiration rate and anesthetic agent with automatic identification of agent type.

* option
Integrated breathing system

Forget about time-consuming, multiple tubing connections between the anesthesia machine, breathing system and patient. Our integrated breathing system (IBS) integrates an ascending bag-in-bottle, patient circuit and CO₂ absorber in one compact unit.

That means no tubings between the breathing system and the machine and only two tubings — for inspiration and expiration — between the breathing system and the patient. Manual bag connection is located under the manual respiration valve.

Setting up for an operation is faster, and cleaning easier. In less than a minute, the machine can be taken apart for cleaning, without any need of special tools. The foolproof design rules out the risk of reassembly errors after cleaning.

**Bag-in-bottle**
Ascending bellows prevent air from being drawn into the breathing system in the event of a leakage. Capacity up to 1500 ml, suitable for adults, infants and neonates.

**Valves**
Yellow valve flaps enable visual supervision of inspiration and expiration. A handy manual respiration valve is also integrated with pressure, closed and spontaneous modes.

**i-SORB absorber**
Available in re-usable or disposable versions, the i-SORB eliminates waste of unused soda lime due to its flow-optimized design.
A sensor detects when the absorber is mounted. The absorber can be replaced while the machine is in operation. Soda lime capacity is 900 g.
## Specifications

<table>
<thead>
<tr>
<th>SIESTA i TS</th>
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<tbody>
<tr>
<td><strong>Dimensions (HxWxD)</strong></td>
<td>1510 x 760 x 670 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>140 kg</td>
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</table>
| **Fresh gas flow**   | Electronic flow meters and flow control  
Total flow range 0-20 L/min |
| **Vaporizers**       | Back bar for two Selectatec vaporizers (German or British standard) with interlock safety mechanism |
| **Integrated breathing system (IBS)** | Hanging Insp./Exp. valve flaps  
Tool-free disassembly in 30 seconds  
Fresh gas introduced after Insp. valve  
Autoclavable |
| **Absorber capacity** | 900 g |
| **Ventilation modes** | VCV, SIMV, PCV, PSV, VSV, PRVT*  
manual, spontaneous |
| **Tidal volume**     | 10 to 1500 ml |
| **Respiration rate** | 4 to 80 bpm |
| **I:E ratio**        | 3:1 to 1:9.9 |
| **Electronic PEEP**  | 4 to 20 hPa |
| **Inspiratory pressure** | PCV 4 to 67 hPa  
PSV 4 to 50 hPa |
| **AGSS**             | 30 to 40 L/min |
| **Ventilation measurements** | Peak, Plateau, PEEP and Mean pressure  
Patient compliance  
Tidal & minute volume  
Spirometry loop  
Respiration rate |
| **Integrated multigas analyser** | Automatic agent ID  
CO₂, O₂, N₂O measurements |

* option
The Siesta i TS anesthesia machine was previously sold and marketed under the Dameca brand. As of March 2011 Dameca was acquired by Royal Philips Electronics.