

The Siemens logo is displayed in a white box in the top left corner. The background of the entire advertisement is a photograph of a tree with green leaves and round, fuzzy seed pods against a blue sky with light clouds.

SIEMENS

Environmental Product Declaration

Sensis

A recording and information system
that grows with your cath lab

[siemens.com/healthcare](https://www.siemens.com/healthcare)

Progress that is Impressive – Ecological Advantages of Sensis

- Sensis allows for paperless documentation and reporting of patient examinations in the cath lab and EP lab. Reports can be e-mailed or directly exported in electronic format to the hospital information system, saving print/paper.
- Stand-by mode:
Sensis lets you easily switch off the examination room equipment when it is not needed for patient examinations (e.g. overnight or over the weekend), thus considerably reducing its power consumption.
- Minimum hardware requirements: Combined Hemo and EP recording system, thus avoiding the need for two separate recording systems.
- All substances contained in the product and its packaging are documented.
- Plastic parts are labeled for recycling.
- Disassembly instructions for high-quality recycling are available.
- Sensis fulfills the EU-directive RoHS 2011/65/EU.
- Product take-back according to strict EU directives.
- More than 95 % of the materials used can be returned to the flow of recyclable materials.
- Environmental product declaration is available for download via internet.
- Reduction of total net weight and decrease of energy demand.





Sensis – Growing with your cath lab needs

Optimizing workflow to increase efficiency and provide optimal patient care is the theme of Siemens' integrated recording solution.

Whether a hemodynamic or an electrophysiological examination is to be performed, Sensis is a true combo system that serves both clinical fields.

Sensis for hemodynamic applications is designed to acquire and display 12-lead ECG, cardiac output (thermodilution, Fick method), SpO₂, non-invasive blood pressure, respiration rate/etCO₂, and up to four invasive pressures.

The EP application supports the most advanced EP procedures with outstanding signal quality.

Up to 64 intracardiac channels via 128 electrode inputs deliver crisp and clear waveforms that can be displayed and analyzed according to the electrophysiologists requirements.

With its DICOM compatibility and extended HL7 engine, Sensis is fully integrated into the hospital network*. Scalable from a single-lab to a multilab solution, it represents the integrated core of the department with one central database for advanced and paperless reporting.





* Option

Environmental Management System

Our environmental, health and safety management system complies with ISO 14001 and aids us in putting our policy into practice.

To find further information about our management system for environmental protection, health and safety, go to www.siemens.com/healthcare-ehs

Environmental Product Design

-  Material supply:
From natural resources to delivery of semi-finished products
-  Production/delivery:
From production of components to operation startup by the customer
-  Use/maintenance:
Includes daily use by our customers as well as maintenance
-  End of life:
From disassembly at the customer through material and energy recycling

Siemens Healthcare considers environmental aspects in all phases of the product life cycle, including material supply, production/delivery, use/maintenance and end of life.

Our product design procedure fulfills the requirements of IEC 60601-1-9 "Environmental product design for medical electrical equipment".

This standard supports the effort to improve the environmental performance of our products.

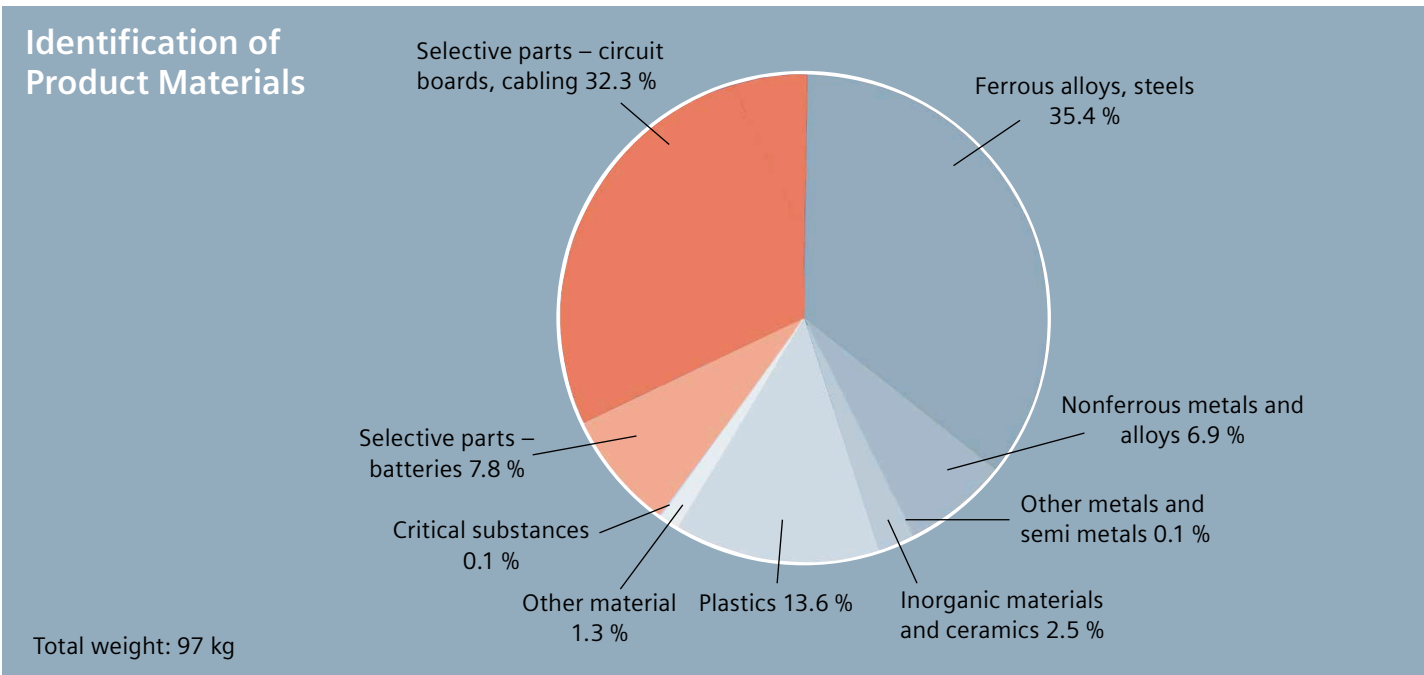
Reduction of Critical Substances

Siemens has made strides to reduce materials in our Sensis system that are environmentally harmful and are not easily recyclable.

One example of this is a recent improvement in the use of a smaller battery in the uninterruptable power supply (UPS).

Siemens has made very good progress in reducing non-recyclable materials. We are continually making improvements to reduce the environmental impact of Siemens products.

Sensis is mainly built of metals. This provides a high degree of recyclability.



Cumulative Energy Demand

Energy consumption is the most important environmental characteristic of medical devices. This is why we use Cumulative Energy Demand to assess environmental performance. Cumulative Energy Demand is the total primary energy* that is necessary to produce, use and dispose of a device – including all transportation.

Our medical devices can be recycled almost completely for materials or energy. With appropriate handling at the end of a product’s service life, it is possible to return up to 1 MWh in the form of secondary raw materials or thermal energy to the economic cycle.

Packaging

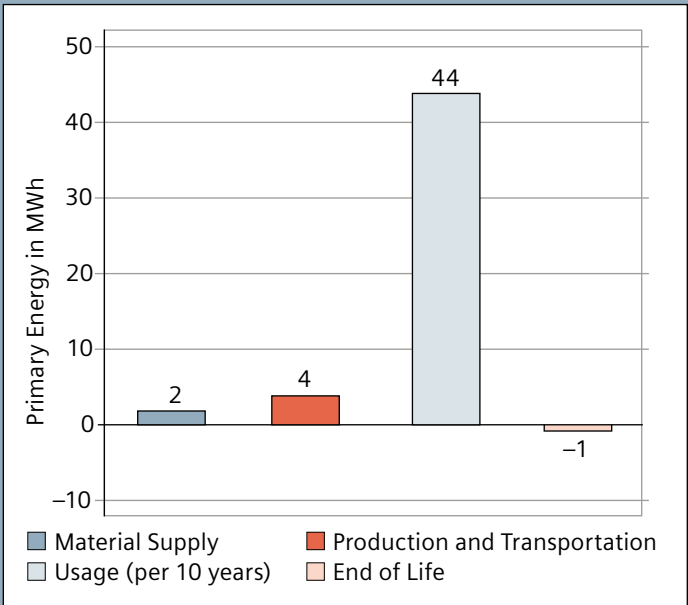
Our recording solutions are shipped in “open packaging” within Europe and to the USA. We use “open packaging” for more than 60 % of our shipments. The individual parts of a delivery need only be wrapped in dust-protective covers. In turn, they are loaded in a special transport frame, which travels from the supplier to the end-customer and is then returned for reuse. We use “closed packaging” for less than 40 % of our shipments only for tropical countries or countries where the law so requires. The wooden crates or sealed packaging can then be used for material, or to some extent, thermal recycling. Values listed on the right represent average values from these two types of packaging.

Total Weight
Open packaging approx. 30 kg
Closed packaging approx. 51 kg

Product Take-Back

Most of the materials used to produce Sensis products are recyclable. 95 % of material (by weight) and 4.4 % of the energy value can be recycled. Our product disposal program ensures that we address the environmental aspects of our products – even the end of the product life cycle. As part of this program, we refurbish systems and reuse components and replacement parts whenever possible through our Refurbished Systems business. We reuse components and subsystems for non-medical products. We also recycle for material or energy value. Disassembly instructions for disposal and recycling are available for our products.

* Primary energy is the energy contained in natural resources prior to undergoing any man-made conversions (e.g. oil, solar).



Operating Data

Operating conditions	
Allowed ambient temperature	+ 10 °C to + 35 °C
Allowed relative humidity	non-condensing, 20 – 75 %

Power Consumption	
Standby	500 W (with examination room equipment switched off)
Full load	Max. 0.75 kW

Power-on time	ca. 4 min
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Power-off time	ca. 1.5 min
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Technical Specifications

Interface for heat recovery	No
Complete switch-off is possible	Yes
Uniform operating symbols for device families	Yes

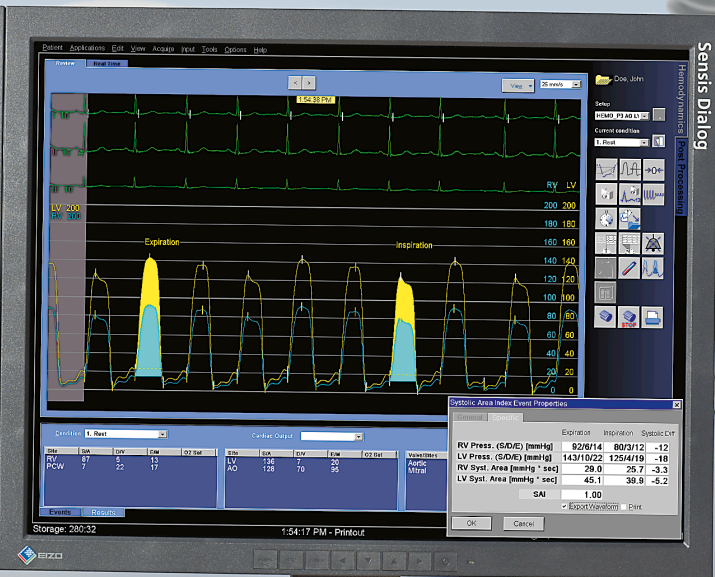
Replacement Parts and Consumables

Item	Life cycle
UPS battery	At least 3 years UPS monitors battery status and reports when battery needs to be replaced

Disposal / Substance Information

End-of-life concept	Yes
Recycling information	Yes
List of hazardous substances	Yes





Cleaning

Incompatible cleaning processes

– total device	No
– restrictions for particular device components	Yes

List of incompatible substance classes

– total device	For cleaning use only water or lukewarm diluted household cleaning solution
– restrictions for particular device components	Yes

Suitability of the device for sterile areas

Yes

Size of the surface to be cleaned (Sensis Signal Input Box, patient cabling)

< 1 m²

More information available in the Sensis Operating Manual

Further Ecologically Relevant Information

Elements of instruction are:

– recommendations for saving energy	Yes
– recommendations for efficient cleaning	Yes
– recommendations for appropriate use of consumables	Yes

More information available in the Sensis Operating Manual

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and are subject to change without prior notice.

Some/All of the features and products described herein may not be available in the United States or other countries.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features that do not always have to be present in individual cases.

Siemens reserves the right to modify the design, packaging, specifications and options described herein without prior notice.

Please contact your local Siemens sales representative for the most current information.

In the interest of complying with legal requirements concerning the environmental compatibility of our products (protection of natural resources and waste conservation), we recycle certain components. Using the same extensive quality assurance measures as for factory-new components, we guarantee the quality of these recycled components.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

Caution: Federal law restricts this device to sale by or on the order of a physician.

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