UROSKOP Omnia
Environmental Product Declaration

www.siemens.com/omnia

Answers for life.
Progress that is Impressive –
Ecological Advantages of UROSKOP Omnia

- UROSKOP Omnia allows for digital RAD images, saving you handling time and costs as well as energy and chemical disposables as no cassettes are needed.
- Thanks to the dynamic flat detector of 43 x 43 cm² (17 x 17 inch²) and a large field of view, you receive real KUB image with a single shot. This means for you real time savings – and for your patient less dose, as only one exposure is required.
- Complete systems and their components are taken back and refurbished.
- Environmental product declaration is available for download via internet.
- Disposal instructions for high-quality recycling are available.
- Very low average daily energy consumption of 11 kWh.

UROSKOP Omnia provides improved remote service.

Compared to our previous system UROSKOP Omnia has an extended remote service option. The improved remote capability offers a telediagnosis which makes it possible to save trips and flights for onsite services. This reduces the emission of greenhouse gas (CO₂) and contributes to the environment protection.

The cassette is replaced by a digital radiography mode. As a result, no cassettes have to be developed in the future which means this expense omits handling with chemicals, hazardous waste and contaminated wastewater.
How can I get real KUB in one shot?

The answer is simple: with our new UROSKOP Omnia.

UROSKOP Omnia – our latest fully digital urology system – lets the urologist see the big picture in urology. Thanks to the completely new dynamic flat detector technology with large field of view, UROSKOP Omnia allows the urologist to cover the entire KUB (kidney, ureter, bladder) tract with only one single shot. This translates into precious time savings during an exam. For the patients this means less dosage, as there is only one image instead of two, and faster examination. Together with exceptional image quality and the ability to zoom into the finest image details without the need of digital interpolation, UROSKOP Omnia helps the urologist to increase diagnostic and therapeutic confidence every single day.

Dose Reduction

In the past, you had to acquire, combine, and read two images in order to cover the entire KUB (kidney, ureter, bladder) area. Thanks to the dynamic flat detector of 43 x 43 cm² (17 x 17 inch²) and the large field-of-view of UROSKOP Omnia only one image and one exposure is needed. This can translate into real time savings. And for the patients it usually means less dose – because only one exposure is required.
Environmental Management System

Our management system for environmental protection, health and safety conforms to ISO 14001, OHSAS 18001 and BS 8800 and helps us put 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 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 IEC60601-1-9:2007 “Environmental product design for medical electrical equipment”.

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

Identification of Product Materials

Total weight: approx. 1560 kg

- Ferrous alloys, steels 75%
- Nonferrous metals and alloys 13%
- Precious metals 0.0043%
- Other metals and semimetals 0.17%
- Inorganic materials, ceramics 1.1%
- Plastics 9.4%
- Other materials 0.18%
- Organic substances 0.47%
- Critical substances 0.81%
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 an appropriate end of life treatment it is possible to return 12 MWh in form of secondary raw materials or thermal energy to the economic cycle.

*Primary energy is the energy contained in natural resources prior to undergoing any human made conversions (e.g. oil, solar).
**The calculation for the 10-year usage is based on 10 patients per day.

Packaging

It is our concern to minimize our packaging material and reduce the packaging waste by reusing and recycling it. UROSKOP Omnia systems are transported in open packaging on pallets or in wood cases (closed packaging) for oversea transports. The values shown on the chart are average values from these kinds of packaging. The remaining packaging material can be reused with a ratio of approx. 40%; 30% can be materially and 70% energetically recycled.

Total weight:
open packaging: approx. 350 kg
closed packaging: approx. 850 kg

Product Take Back

Our product take back program ensures we address the environmental aspects of our products – even at the end of life. 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.
Operating Data

Heat emissions of the device
- basic load\(^1\) \(0.81\) kW
- full load\(^{(\text{fluoroscopy})}\) \(2.3\) kW

Allowed room temperature\(^2\) \(15^\circ\text{C}–35^\circ\text{C}\)

Allowed relative humidity\(^2\) \(20\%–75\%\)

Noise level
- basic load\(^1\) \(\leq 70\) dBA
- full load n.a.

Energy consumption
- basic load\(^1\) \(0.81\) kW
- full load\(^{(\text{fluoroscopy})}\) \(2.3\) kW
- full load\(^{(\text{acquisition, Polydoros F65})}\) \(65\) kW
- full load\(^{(\text{acquisition, Polydoros F80})}\) \(80\) kW
- average daily consumption\(^5\) \(11\) kWh

Power-on time\(^3\) \(\leq 3\) min

Power-off time\(^4\) \(\leq 1\) min

1 device is in operation but no patient examination takes place
2 within examination room
3 from off-mode (detector still in operating state) to operating state
4 from operating state to off-mode (detector still in operating state)
5 10 patients/day

Technical Specifications

Possible type of cooling air cooled

Complete switch-off is possible ✓

Device is adjustable for the user in terms of height ✓

Interface for Heat Recovery n.a.

Uniform operating symbols for device families ✓

Radiation

Measures/techniques to minimize ionizing radiation exposure CARE* program

Minimization compared to the limit value for patients n.a.

Measures/techniques to minimize the exposure to electromagnetic radiation n.a.

Minimization compared to the limit value for users CARE* program

*Combined Applications to Reduce Exposure (CARE), a Siemens initiative for dose reduction

The Siemens CARE initiative

While always improving image quality, we are also committed to further reduce dosage – with the Siemens CARE (Combined Applications to Reduce Exposure) initiative. We have equipped our UROSKOP Omnia with our CARE features. From radiation-free positioning of the primary collimators and pulsed fluoroscopy to automatic optimization of the exposure data, we offer you a great number of features that help you reduce dosage for both patients and staff.
**Replacement Parts and Consumables**

<table>
<thead>
<tr>
<th>Item</th>
<th>Life cycle*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain bags</td>
<td>1 per patient</td>
</tr>
</tbody>
</table>

*Recommended exchange interval

**Disposal / Substance Information**

<table>
<thead>
<tr>
<th>End of life concept</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling information</td>
<td>✓</td>
</tr>
<tr>
<td>List of hazardous substances (not contained in the device)</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Cleaning**

<table>
<thead>
<tr>
<th>Incompatible cleaning processes</th>
<th>n.a.</th>
</tr>
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<tbody>
<tr>
<td>• total device</td>
<td></td>
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<tr>
<td>• restrictions for particular device components</td>
<td>n.a.</td>
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</tbody>
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<table>
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<th>List of incompatible substance classes</th>
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<td>• restrictions for particular device components</td>
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| Suitability of the device for sterile areas | n.a. |

| Size of the surface to be cleaned | approx. 4 m² |

**Further Ecologically Relevant Information**

<table>
<thead>
<tr>
<th>Elements of instruction are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• recommendations for saving energy</td>
</tr>
<tr>
<td>• recommendations for efficient cleaning</td>
</tr>
<tr>
<td>• recommendations for appropriate use of consumables</td>
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</tbody>
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This declaration is for information purposes only, it is not part of the specification and does not represent any warranty or guarantee.

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