Uroskop Omnia Max

Sharper images made smarter

siemens-healthineers.com/uroskop-omnia-max

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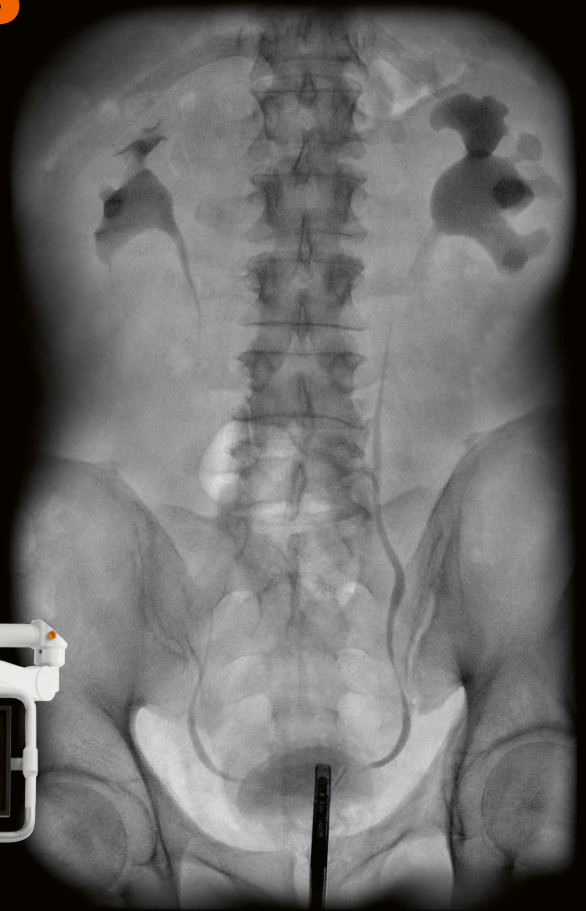
Examinations in urology are changing

Over the last years, minimally invasive procedures such as PCNL or URS have increased significantly compared to invasive procedures when treating various diseases of the urinary tract like prostate cancer and kidney stones. Especially non-invasive ESWL procedures have been largely replaced by minimally invasive procedures, as recent studies show.

Uroskop Omnia Max meets these changing demands: It offers a full-field FD for a better overview of the entire urogenital tract, multi-modality viewing, and unmatched patient access on both sides.

Procedures in urology are changing toward minimally invasive techniques worldwide
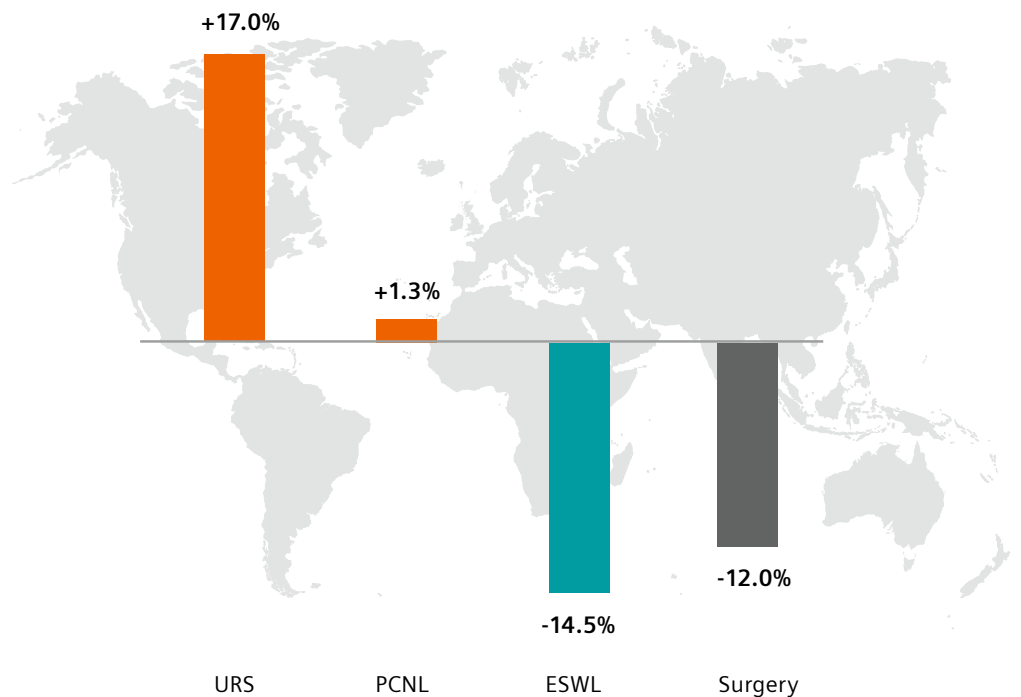
The share of total treatment for urolithiasis increased for URS, is stable for PCNL, and decreased for lithotripsy and open surgery. Graphic shows the global results of a study conducted in Australia, Brazil, UK, and USA from 1996 – 2013.[1]

[1] Geraghty Robert M., Jones Patrick, and Somani Bhaskar K. Journal of Endourology. June 2017, 31(6): 547-556. *Worldwide Trends of Urinary Stone Disease Treatment Over the Last Two Decades: A Systematic Review.*

Reducing time and effort with Uroskop Omnia Max

In urology, inferior image quality, insufficient system ergonomics, and suboptimal image management can result in uncertain decision-making, cumbersome case preparation, and even delays during an intervention. Is there a solution that helps you successfully meet these challenges?

Offering superior imaging technology, truly unrestricted patient access, and an unhindered view of all modalities, Uroskop Omnia Max supports you in optimizing operational efficiency and patient safety. You can capture the entire Kidney-Ureter-Bladder (KUB) tract with a single shot in exceptional image quality at the lowest possible dose – and see even the finest details.

Free patient access from all sides and smart system position-ing by pushing a single button result in faster, more accurate examinations and interventions.

You can also display, compare, and archive images from multiple sources during patient treatment to gain a holistic view of the patient.

Uroskop Omnia Max has been designed to provide sharper images, unique ergonomics, and a faster overview. Therefore, you can concentrate on what really matters: your patient.

Discover Uroskop Omnia Max

Uroskop Omnia Max at a glance

Offer low-dose imaging

The large dynamic flat detector of Uroskop Omnia Max delivers sharper images and acquires the entire KUB in one shot. Our CARE dose reduction program decreases radiation exposure without compromising image quality.

Get access from all sides

Due to the patented curved design of the X-ray column, Uroskop Omnia Max offers unrestricted patient access from all four sides. Anesthesiologist can stay at the table head, regardless of the clinical application.

Improve your processes

Experience the fastest way to the correct system position in every examination: Uroskop Omnia Max offers automated and simultaneous movements. Its intuitive controls allow efficient system operation even from within the sterile field. What's more, you can navigate from the KUB to a desired image detail quickly, precisely, and radiation-free.

Personalize when it matters

Imaging children who are ill and in pain can be challenging. Uroskop Omnia Max provides child-friendly and efficient low-dose examinations. Dedicated accessories for pediatrics help you easily and safely position children and reduce movements during an examination.

Keep your IT secure

To protect your IT equipment and patient data from cyber attacks, Uroskop Omnia Max has been designed to be in compliance with the requirements of the US Department of Defense. This high level of cyber security is standard right from the start. And role-specific user rights support an easy workflow.

Sharper images – exceptional quality at the lowest possible dose

Limited anatomical coverage and image quality can result in low diagnostic confidence and higher patient dose. Delivering 43 cm x 43 cm distortion-free, high-quality dynamic sequences and static images of the entire KUB tract in one exposure, Uroskop Omnia Max supports effective treatments.

One shot – high-quality KUB images
See more with the full span of the large dynamic flat detector. It delivers distortion-free, high-quality dynamic sequences and static images of the KUB tract in one exposure – offering full patient coverage with a detailed resolution of up to 3.4 lp/mm.

Less noise – better detail recognition
DiamondView Plus significantly reduces noise while increasing detail contrast and sharpness of your radiographic images – with enhanced soft-tissue contrast and finer bone detail. Predefined settings based on organ programs help you save time and effort and further reduce dose.

Faster navigation – lower dose
In addition to always sharpening up on image quality, we are also committed to further reducing dose for patient and staff – with our unique CARE[1] initiative. CAREPROFILE[2] and CAREPOSITION,[2] for example, let you quickly navigate to a detail in a KUB image while ensuring full orientation. Easily navigate to a region of interest such as half-side, kidney or bladder by just pushing a memory button – completely radiation-free. This saves time and increases patient safety.

Safe imaging – even of children
Children have a much greater sensitivity to radiation than adults. Uroskop Omnia Max supports you in performing fast, safe, and correct pediatric imaging – assisted by radiation-free positioning and dedicated parameters for low dose.

The right dose
The comprehensive CARE dose reduction program decreases radiation exposure for patients and staff, without compromising image quality. The dynamic flat detector, with a state-of-the-art Cesium Iodide scintillator, gives you the choice of various acquisition modes, such as low-dose DFR or full-resolution RAD images.

- **CAREFILTER**
  Automatic copper filters to reduce skin dose

- **CAREMATIC**
  Automatic exposure parameters

- **CAREMAX[2]**
  Dose-area measurement and monitoring

- **CAREVISION**
  Pulsed fluoroscopy with 30, 15, 10, 7.5, and 3 p/s

- **FluoroLoop[2]**
  Prospective and retrospective storage and review of fluoroscopy sequences

- **CAREPROFILE[2]**
  Radiation-free collimation using Last Image Hold (LIH) for orientation

- **CAREPOSITION[2]**
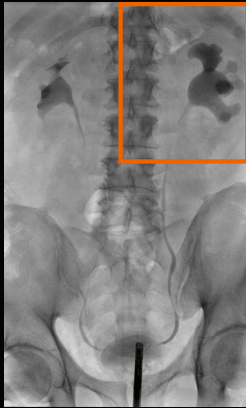 Radiation-free patient repositioning using a virtual field display on the LIH

"Uroskop Omnia Max has a very large field of view and several different imaging modes. The high quality is just unbelievable."

Bradley McIver, MD
Shannon Medical Center, San Angelo, USA

Targeted navigation keeping full orientation – completely radiation-free.

Sharper images for all procedures: DiamondView Plus and Dynamic Density Optimization[2] (DDO) reduce image noise and enhance soft-tissue contrast – for more detail without increasing dose.

Targeted navigation

With DiamondView Plus and DDO[1]

Without advanced imaging filter

The dynamic flat detector offers 116% more image area and lets you see real KUB in one exposure.

33 cm (13") image intensifier

43 cm x 43 cm (17" x 17") dynamic flat detector

Unique ergonomics – from patient access to system positioning

For some urology procedures, patient access can be an issue – up to the point that the entire OR setup has to be adjusted, which slows down the speed of care. Offering truly unrestricted patient access from all sides, Uroskop Omnia Max eliminates the need for patient repositioning.

Patented design – free access
The patented curved X-ray column offers truly unrestricted patient access from all four sides. You can clearly see your images from any position. Also, there is no need to reposition the patient, whatever the procedure, and the anesthesiologist can always remain at the table head. Your benefits: less preparation time, faster examinations, and significant time savings.

Faster operation – reproducible positions
With SmartMove, Uroskop Omnia Max automatically takes the fastest and shortest way to any position you need – at the touch of a button. With up to seven predefined, automatic, and simultaneous functions, you can reach new levels of consistency and efficiency in every examination.

Easy adjustment – for small and slender patients
Easily and quickly adapt Uroskop Omnia Max to the needs of children or very slender adults. Just move the grid into a parking position – motor-driven, with the push of a button.

"Free access to the patient, individually adjustable table height, and intelligent table movements are further features that make working with Uroskop Omnia Max easy and convenient. In addition, patient comfort is increased while examination time is reduced."
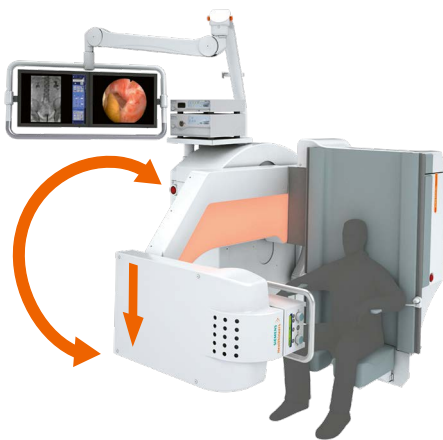
Michael Straub, MD
Technische Universität München, Klinikum rechts der Isar, Munich, Germany
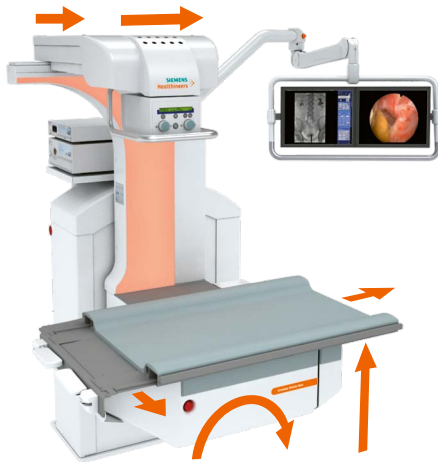

By pushing a single button, the system moves to where you need it; e.g., from the patient transfer position to your standard working position.
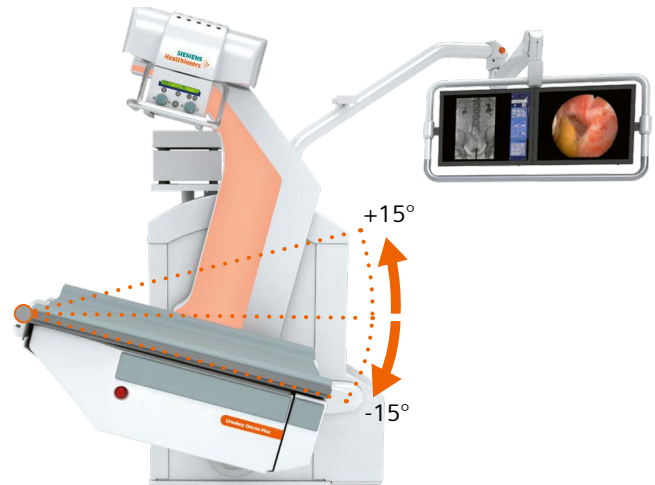
When moving to a Trendelenburg position, the table height is leveled around the perineal end to keep your working height constant.

When moving to a sitting micturition position, the patient can sit comfortably with feet on the ground.
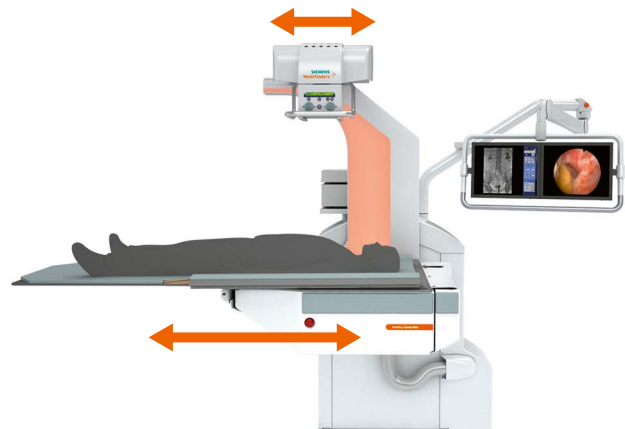
Through a combination of table, tube, and detector movements, longitudinal patient coverage can be extended to up to 98 cm.

Faster overview – images from all modalities in sight

Having images on multiple seperate sources can lead to intraoperative waiting times and even cramped work environments. Uroskop Omnia Max displays all multimodality images you need side by side – allowing for ergonomic working positions and efficient documentation.

All in one place – side by side
SmartView[1] lets you view and compare a variety of images side by side during interventions. You can display live and reference images from endoscopy, ultrasound, and all DICOM modalities – next to your radiography or fluoroscopy images. The plug-and-play interface HD VideoManager lets you also view endoscopy images even in High Definition (HD). So you have everything you need in one place and in exceptional image quality.

Multimodality images – stored together
SmartView[1] also allows convenient storage of images. With HD EndoStore,[1] you can file images from all modalities together with X-rays as DICOM images in one patient folder. Just one more click and they will be sent to your PACS as a bundled package – for fast retrieval anytime.

All modalities in sight – anywhere
Every member of your intervention team can easily access all images in both the intervention room and the control room. In addition, images can be seamlessly transferred via HD VideoManager[1] to an additional screen or urodynamic system.

Unique handling – for sterile operation
Uroskop Omnia Max is the only system that allows you to operate SmartView[1] using a multifunctional footswitch. Your great advantage: Sterile operation is always ensured.

"For orientation during urologic interventions, I benefit from the system's ability to simultaneously display X-ray images and on a second screen endoscopic or sonographic images. Storing all these images is an important function for a complete case documentation."
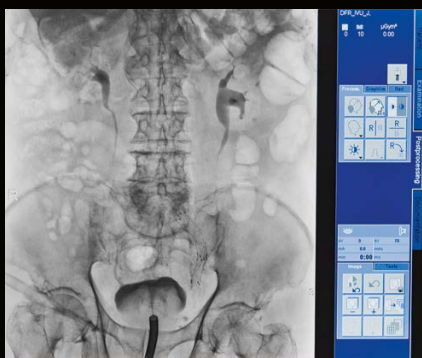
Steffen Krause, MD
Kepler Universitätsklinikum GmbH, Linz, Austria
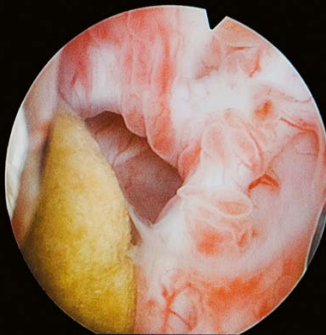
Connect endoscopy and ultrasound to the HD Video-Manager[1] and see them side by side with your X-ray and fluoroscopy images.
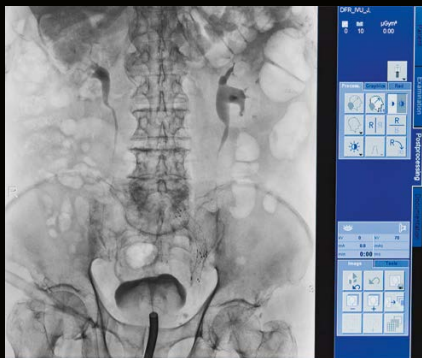
Connect a PACS viewer to the HD VideoManager[1] and see multimodality DICOM images together with your live X-ray and fluoroscopy images.

Monitor signals can also be fed out with HD Video-Manager,[1] for example, to a urodynamic system.

See anatomical details in high image quality

To make fast and confident diagnostic decisions, you need high image quality. Uroskop Omnia Max offers advanced imaging and post-processing technologies and a large field of view.

Intravenous pyelogram (IVP)[1]

Conduitogram

Percutaneous nephrostomy (PCN)
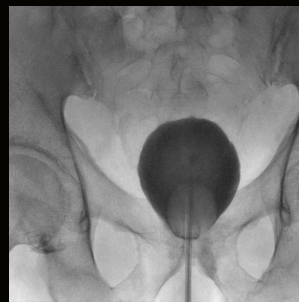
Ureterorenoscopy (URS)

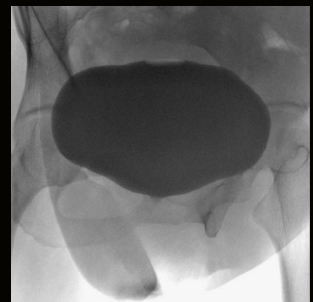Retrograde pyelography

Double-J stent insertion

Retrograde urethrogram (Lauenstein)

Retrograde urethrogram (lateral)

Cystogram (a.p.)

Cystogram (lateral)

Service and exchange

Increasing value by partnering throughout the entire equipment lifecycle.

Equipment Maintenance & Monitoring
Reliably servicing your Uroskop Omnia Max allows you to identify deviations from current norms to maximize equipment availability.

Education Management
Personalized education and training improve your staff's expertise as well as your equipment efficiency.

Fleet Management
A transparent overview of your fleet allows you to manage the performance and maintenance of your Siemens Healthineers equipment, 24/7.

Accessory Solutions
Products from our partner companies complement your use of our equipment in your daily workflow.

Performance Management
An intelligible overview of your radiography performance data helps you make prompt and well-informed decisions.

Asset Management & Planning
Access to innovative medical technology and equipment throughout the entire contract lifetime allows you to maximize focus on patient care.

Business Modelling & Financing
Customized business and financial models address your budgetary and enterprise needs, enabling you to remain more competitive.

Departmental Layout Optimization
3D visualization and digital twin analysis create more efficient workflows and a more enjoyable working environment.

Continually adding value and caring for your equipment, your staff, your fleet, your workflows, your department, and your entire institution.

Technical specifications

Tube & Generator
- Choice of 65 kW or 80 kW[1] high-frequency generator
- High anode heat capacity (783 kHU) and air-cooled X-ray tube assembly

Fully motorized table
- Tilting ± 90° for examinations with patient seated or standing
- Trendelenburg tilt ± 15° around perineal table end
- 72 cm to 122 cm (28" to 48") adjustable table height
- Table size of 115 cm x 76 cm (45" x 30")
- Longitudinal ± 20 cm (8") and transverse ± 12.5 cm (5") movements
- Max. patient capacity of 272 kg (600 lbs)

Image acquisition & post-processing
- 43 cm x 43 cm (17" x 17") dynamic flat detector for excellent static and dynamic imaging
- CAREVISION pulsed fluoroscopy with 30, 15, 10, 7.5, and 3 p/s
- Workstation with two 48 cm (19") TFT displays
- DiamondView Plus for increased image sharpness and soft tissue detail
- Pediatric organ programs

Workflow
- System-mounted swivel arm with two large 48 cm (19") TFT displays
- SmartView[1] – access to all imaging modalities and display of live images from multiple sources such as endoscopy, ultrasound, or review workstations
- Single remote console for control of table, tube, detector movements
- Multifunctional footswitch[1] – intuitive, sterile control of all system movements and video functions, exposure, and fluoroscopy

Why Siemens Healthineers?

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare.

An estimated five million patients worldwide everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine as well as digital health and enterprise services.

We're a leading medical technology company with over 120 years of experience and 18,500 patents globally. With about 50,000 dedicated colleagues in over 70 countries, we'll continue to innovate and shape the future of healthcare.

Uroskop Omnia Max is not commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

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