



**LUMINOS Lotus Max**

**Two disciplines.  
One flow.**

[siemens-healthineers.com/luminos-lotus max](https://siemens-healthineers.com/luminos-lotus-max)



# Discover a system second-to-none

The combination of fluoroscopy and radiography in one system isn't new. Still, a limited integration of these two disciplines prevents from an efficient system usage.

In many X-ray departments, the consequences are evident: Inefficient system operation and reduced clinical versatility can lead to delays and interruptions – and ultimately to a cumbersome imaging process. This in turn, reduces patient throughput and produces low-quality results.

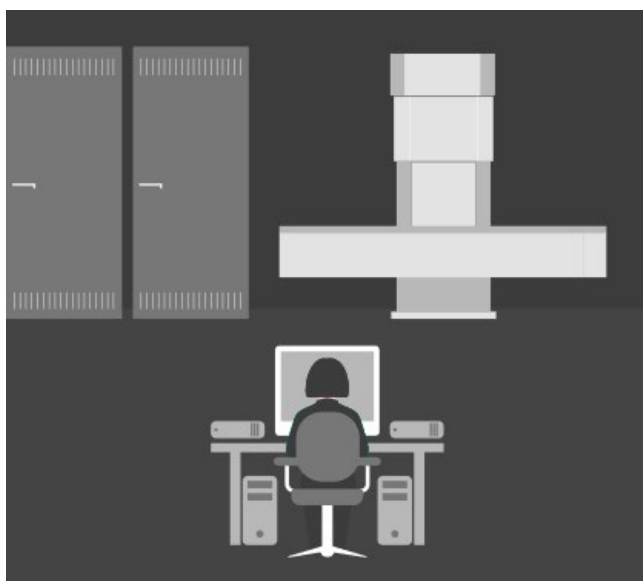
- 
- Why use two systems if you can use just one?
  - Why use two consoles if you can use just one?
  - Why use two generators if you can use just one?

It's time to simplify.

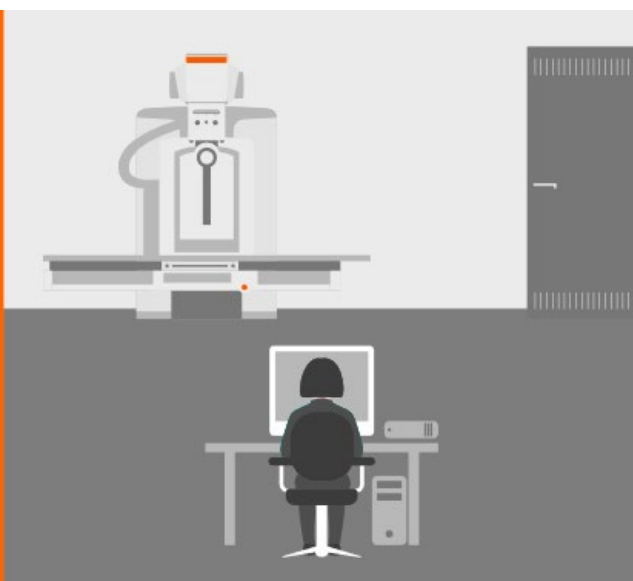
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Institutions that have the privilege of using a 2-in-1 fluoroscopy and radiography system with true integration can enjoy the value of a seamless flow in all aspects.

Competitors



Siemens Healthineers





# Experience the value of true integration

LUMINOS Lotus Max, a state-of-the-art premium fluoroscopy and radiography system, lets you experience the true value of integration and enables a seamless flow in all aspects.

The flow in system operation is achieved thanks to a seamless integration of two disciplines and SMART solutions in one system – to assure flawless and pleasant imaging. The flow of LUMINOS Lotus Max is also evident in its versatility. Just one system covers a wide range of examinations and diverse patient types, from pediatrics and bariatrics to geriatrics. On top of that, you can feel the flow with our proven CARE focus to reduce dose without compromising on clinical outcomes for improved staff and patient experience.

LUMINOS Lotus Max keeps everything flowing – from ideal workflows through a rich selection of clinical examinations to comprehensive dose management.

**The result? Perfect flow across two disciplines.**

## Discover LUMINOS Lotus Max

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# LUMINOS Lotus Max at a glance



## Flow in system operation

The flow in system operation is achieved thanks to a seamless integration of all components and their flexible operation via SMART solutions. All examinations can be performed with no limitations, an unprecedented ease, and consistent results.

## Flow in clinical versatility

The flow of LUMINOS Lotus Max is also evident in its versatility. Just one system covers a wide range of examinations and diverse patient types – from pediatrics, through bariatrics to geriatrics.

## Flow in dose management

You can feel the flow in dose management with pre-defined organ programs, our proven dose-saving CARE focus, and image processing. They provide clear and detailed anatomical structures in dynamic sequences and static images at a minimum radiation dose.



## High level of cybersecurity

To keep your IT network and sensitive patient data safe from cyberthreats, LUMINOS Lotus Max features security by design and a comprehensive range of features to keep your equipment protected throughout the years to come. For an even higher level of security, advanced cybersecurity options can be added.

## Fleet Level Benefits

Siemens Healthineers offers specific solutions across the entire X-ray portfolio that let you standardize, analyze and secure your fleet. This let you obtain valuable Fleet Level Benefits: consistency, transparency and confidence for improved efficiency and greater staff and patient satisfaction.

# Flow in system operation

Two disciplines. One integration.

The flow in system operation is achieved thanks to a seamless integration of two disciplines in one system and user-friendly system operation via SMART solutions.

## Seamless integration for ideal workflows

All planes and all components of LUMINOS Lotus Max are fully integrated in an unsurpassed way on one system. They are controlled with a single control element from anywhere you need to be – from the control room or the examination room, for full flexibility and freedom.

There's no place for delays or interruptions with this system that combines both disciplines in one imaging system, one pipeline, and one generator cabinet, and using the same wireless foot switch – so you can enjoy flawless imaging. And this great result: outstanding operational excellence.



Easy patient access from all sides thanks to ergonomic system design.



**SmartStepOn<sup>1</sup>:** Wireless footswitch for two disciplines – radiography and fluoroscopy. Gain more freedom for system operation and avoid unnecessary radiation dose with a wireless footswitch concept.





## SMART solutions for flawless imaging

Users will also benefit from intuitive SMART solutions that assist them in friendly and efficient ways, including:



**SmartOrtho<sup>1</sup>:** Benefit from fast, automated image acquisition and composition in one large image. All long-leg and full-spine exams can be performed on the main system and on the 2<sup>nd</sup> plane.



**SmartMove<sup>1</sup>:** Experience how the system automatically takes the fastest route to the position you need when you press a single button for faster, easier, and more consistent imaging.



**SmartView<sup>1</sup>:** Obtain a fast and convenient display and storage of imaging content from other modalities e.g. endoscopy or ultrasound.

# Flow in clinical versatility

Two disciplines. One system.

The flow of LUMINOS Lotus Max is also evident in its clinical versatility and helps you redefine care delivery. It results in a comprehensive clinical mix coverage and efficient system utilization. Just one system covers a wide range of examinations and diverse patient types, from pediatrics and bariatrics to geriatrics.

## Full clinical versatility in a wide range of examinations

Perform fluoroscopy examinations with no limitations in operations or in the clinical mix thanks to:

- Full table tilting scope of  $\pm 90^\circ$ <sup>1</sup>
- Large dynamic fluoroscopy detector of 43 cm x 43 cm (17" x 17")
- Customizable fluoroscopy rate of 3, 7.5, 10, 15 and 30 p/s



Experience fluoroscopy examinations with no limitations.

Easily and efficiently perform DSA<sup>1,2</sup> and ERCP<sup>3</sup> on LUMINOS Lotus Max thanks to:

- **SmartView**<sup>1</sup> for a fast and easy display of endoscopic imaging content
- **SmartDisplay**<sup>1</sup> – for the flexible, comfortable, and safe ceiling-suspended monitor positioning that's important for an ERCP
- **Semitransparent filters**<sup>1</sup> – for high image quality in DSA



**SmartDisplay**<sup>1</sup>: Make the most of your space and maximize flexibility by freely positioning your monitors in the exam room.

<sup>1</sup> Option

<sup>2</sup> Digital subtraction angiography

<sup>3</sup> Endoscopic retrograde cholangiopancreatography





Even perform thorax examinations with the system tube.



Maximize your clinical capabilities with a ceiling-suspended X-ray tube<sup>1</sup> e.g. cross table examinations.

A full scope of radiography examinations can also be performed thanks to the option to upgrade to a BWS<sup>1,2</sup>, MAX wi-D<sup>1</sup> – a large wireless detector (35 cm x 43 cm; 14" x 17") – and a second ceiling-suspended tube<sup>1</sup> for full flexibility in SID and examination angle.

Benefit from full-leg and full-spine exams with SmartOrtho<sup>1</sup> on the main system and on the BWS<sup>1</sup> without the need to reposition a patient.

The goal? Coverage of a comprehensive clinical mix and efficient system utilization.

## Safe and pleasant imaging for all patient types – from pediatrics through bariatrics to geriatrics

All patient types can be examined with one system. Safe and pleasant pediatric imaging is enabled through dose-optimized organ programs, low table minimum height of 48 cm (19") and a MAX mini detector of 24cm x 30 cm (9" x 12").

Relaxed and pleasant examinations for bariatric patients with a 300 kg maximum table capacity and a 80 cm table width.

Safety collision bumpers and SmartTouch ensure a safe examination for those who need safety the most: the less-mobile geriatric patients.



Safe and pleasant imaging for pediatric patients.



Safe exams for immobile geriatric patients.

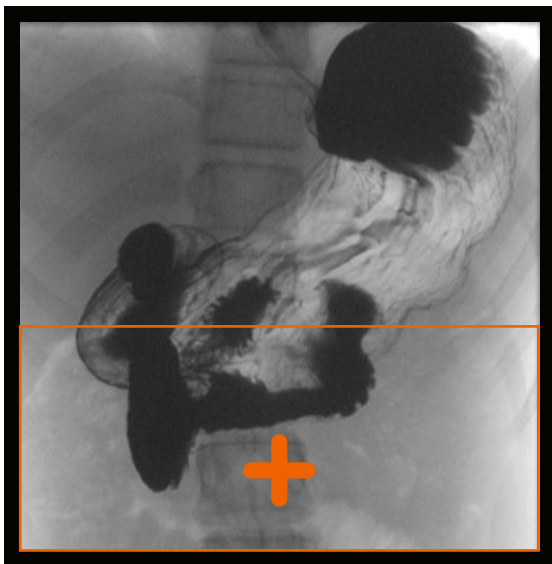
<sup>1</sup> Option

<sup>2</sup> Bucky Wall Stand

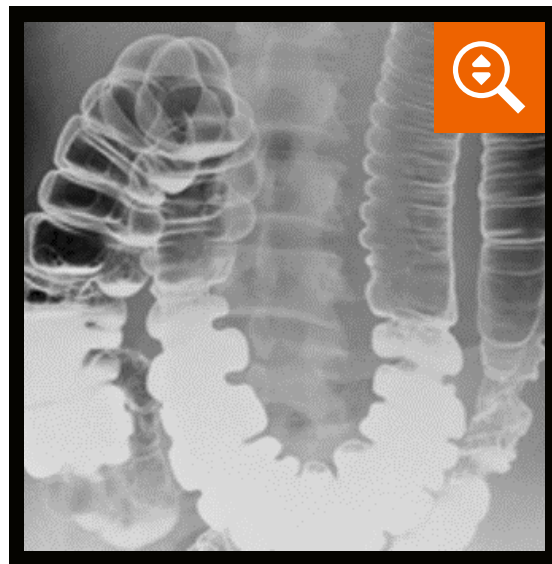
# Flow in dose management

Two disciplines. One dose management.

You can feel the flow in a comprehensive dose-saving approach with our proven CARE focus, image processing and pre-defined organ programs to reduce dose without compromising clinical outcomes for improved staff and patient experience.



CAREPOSITION: Dose-free patient repositioning.



Digital zoom

## Bring flow in imaging with CARE focus for low dose and highly efficient outcomes

Siemens Healthineers offers two CARE packages:

### Basic CARE package

Reduces the radiation dose for patients and staff using dose-free applications such as:

- **CAREPOSITION:** Reduce radiation dose with a dose-free patient repositioning
- **CAREPROFILE:** Reduce radiation dose with dose free image collimation

**Enhanced CARE package<sup>1</sup>** – Lets you focus on your patients by ensuring a seamless workflow and allows you to avoid additional radiation dose

- **Snapshot Mode** – Enjoy immediate low-dose image capture
- **Histogram Dose Regulation** – Enjoy automatic dose regulation for more efficient workflows
- **Digital Zoom** – Benefit from dose-free zooming-in on clinical images
- **Proactive FluoroLoop** – Focus on the patient and avoid additional radiation dose

# DiamondView MAX

Apply low dose and enjoy exceptionally sharp images with DiamondView MAX

DiamondView MAX is our unique image processing engine that delivers exceptionally sharp static and dynamic images with enhanced contrast, a high level of detail visibility, and optimized noise reduction – at low dose for all adult and pediatric patients.



Study ID: 5aab052



Study ID: 5aab055



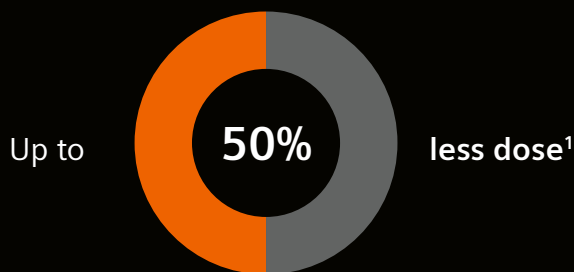
Study ID: 5aab51



Study ID: 5aab100

DiamondView MAX optimizes the quality of pediatric images when a copper filter is used to reduce patient dose. Low dose achieved by predefined dose-saving settings of the organ programs (OGPs).

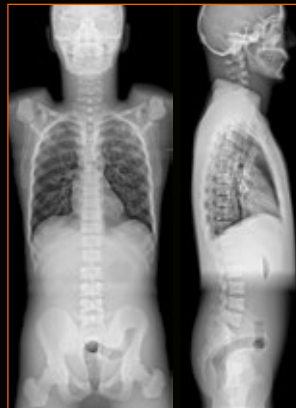
Achieve clear, detailed, high-contrast images you need for confident diagnostic decisions even in gridless imaging – at very low dose.



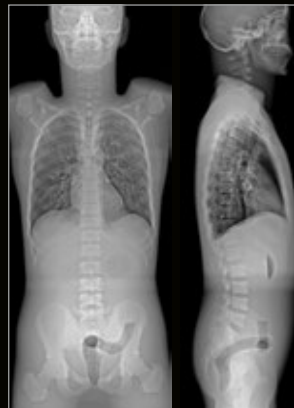
By focusing on vertebral alignment instead of bone structure, the new low-dose scoliosis SmartOrtho organ program lets you decrease dose by up to 50% – ideal for follow-up scoliosis exams.<sup>1</sup>

Low-dose scoliosis SmartOrtho

SmartOrtho



Study ID: 5aaa558



Study ID: 5aaa558

<sup>1</sup> Values were achieved in a phantom study.

# Fleet Level Benefits

Unlock your potential – and increase the efficiency across your imaging fleet

As healthcare provider you are forced to do more with less, you have to run your radiology department more efficiently. A high level of complexity makes it challenging for you to reach the desired efficiency. Siemens Healthineers offers specific solutions across the entire X-ray portfolio

that let you standardize, analyze, and secure your fleet. Experience consistency, transparency, and confidence as valuable Fleet Level Benefits and improve outcomes, increase efficiency – and achieve greater staff and patient satisfaction.

**Standardize**  
for consistency



**Analyze**  
for transparency

**Secure**  
for confidence



## **Standardize** for consistency

- Systems with highly intuitive user interfaces and common workflows
- Staff with consistent knowledge level
- Unified image quality and same image impression



## **Analyze** for transparency

- Consolidated data in one place
- Analyzed and evaluated data turned into valuable information



## **Secure** for confidence

- Protect large IT network and imaging fleet with one cybersecurity philosophy
- Same maintenance cycles and update strategies for the whole fleet

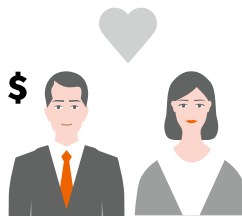
# High level of cybersecurity

High level of cybersecurity by design is available with LUMINOS Lotus Max

Did you know that the risk of experiencing a data breach at a hospital is much higher than getting struck by lightning or dating a millionaire?



**1 in 960,000**  
get struck by lightning?



**1 in 220**  
date a millionaire?



**1 in 4**  
hospitals are at risk  
of experiencing  
a data breach?

Source: IBM Ponemon Institute 2018 Cost of Data Breach study.

**LUMINOS Lotus Max** features security by design and a comprehensive update of cybersecurity options to keep your medical equipment protected throughout the entire lifecycle. The system is delivered with standard cybersecurity offerings and if necessary, advanced security solutions can be optionally added for an even higher level of security.

- Count on cybersecurity solutions which are developed in accordance with the strictest Department of Defense (DoD) regulations
- Comply with ever-stricter requirements and standards

## Standard

### Secure Development Lifecycle

- Secure Coding & Testing
- Vulnerability Scanning
- Penetration Testing

Whitelisting

Encrypted data storage

90-days hotfixes

## Option

### Advanced security package

- Advanced user management
- Centralized access role management
- Audit trail
- DICOM encryption

### Hardware security package

- Lock to generator cabinet
- Hardware port covers for syngo FLC

# See anatomical details in high image quality

To make fast and confident diagnostic decisions, you need high image quality. LUMINOS Lotus Max offers DiamondView MAX – our unique image processing engine and a large field of view.

## Excellence in fluoroscopy applications



Enhanced contrast at low dose for gastrointestinal examinations.



Swallow studies with high frame rates.

Study ID: 5aaa144



Digital subtraction angiography (DSA)<sup>†</sup> and road-mapping.<sup>†</sup>

Study ID: 5aaa964



Excellent patient access for ERCP examinations.

Study ID: 5aaa511

## Excellence in radiography applications



Easy positioning and standardization with predefined organ programs.

Study ID: 5aaa111



High accuracy for lumbar spine examination.

Study ID: 5aaa875



Fully automatic ortho imaging.<sup>†</sup>

Study ID: 5aaa048



High throughput for chest X-rays with clear details.

Study ID: 5aaa514



# Benefit from innovative services

Increasing value by partnering throughout the entire lifetime of your equipment



Continuously adding value and caring for your equipment, your workforce, and your entire institution.

## Equipment Maintenance & Monitoring

Reliably servicing your LUMINOS Lotus allows you to identify deviations from current norms to maximize equipment availability.

## Education Management

Personalized education and training improves 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.

## 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 life-time allows you to maximize focus on patient care.

## Accessory Solutions

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

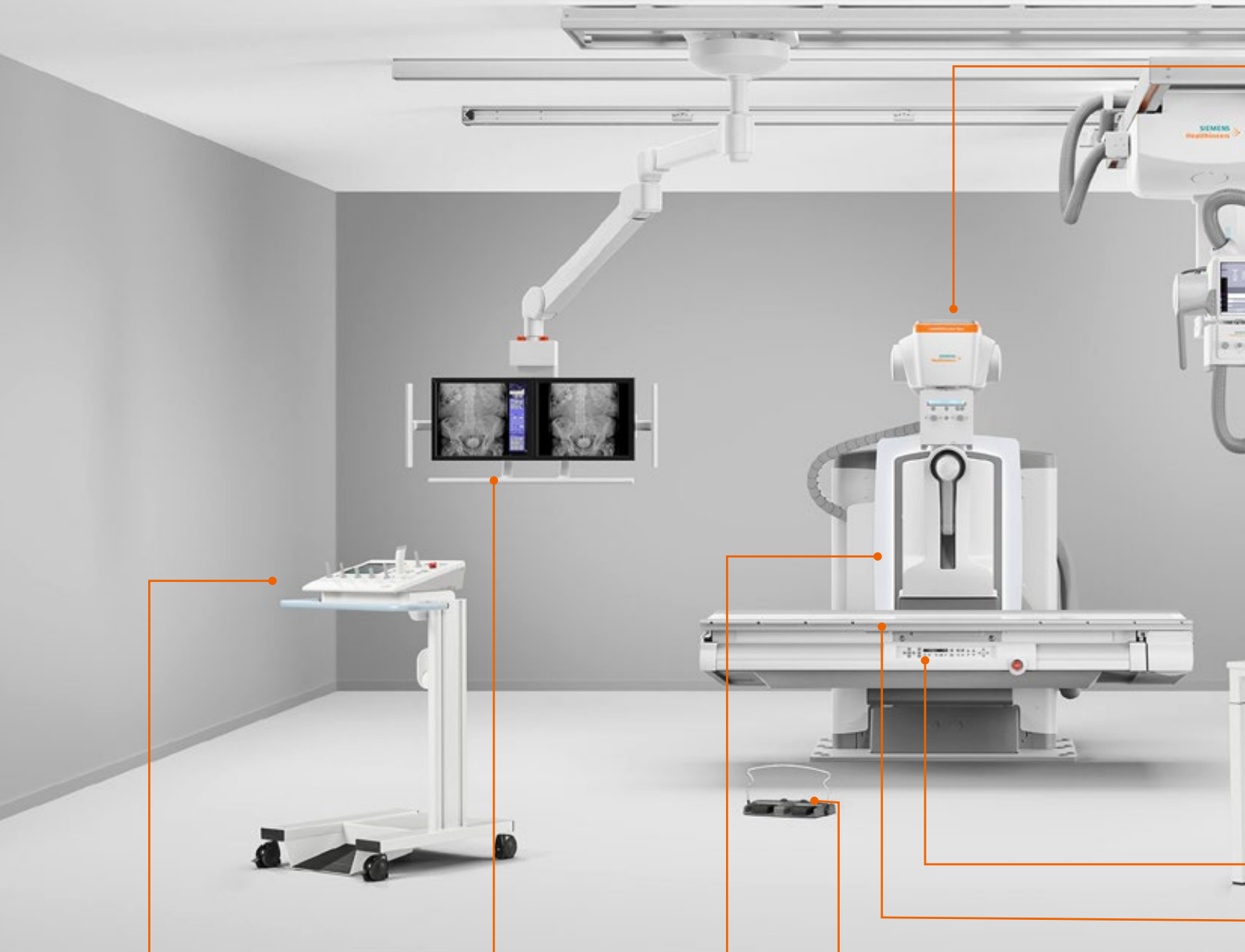
## Business Modelling & Financing

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.

# Technical specifications



## Control Console<sup>1</sup>

Control console for more flexibility in exam rooms with SmartTouch – touch-sensitive joysticks activated only by a human touch

## SmartDispay<sup>2</sup>

Display Ceiling Suspension: for flexible, comfortable, and safe DCS positioning

## Moodlight<sup>2</sup>

MoodLight creates a friendly working environment for patients and staff.

## SmartStepOn<sup>2</sup>

Wireless foot switch: prevents unnecessary dose and delivers more safety and freedom



## System X-ray tube

- Anode heat capacity: 820 kHU
- Collimator with semitransparent filters<sup>1</sup>

## Ysio Max ceiling-suspended tube

- With a large touchscreen of 26 cm (10.4") touch user interface (TUI)

## Bucky wall stand

- Automatic tube tracking for smooth exam preparation
- Vertical travel range: up to 145 cm
- Low central beam height: 27 cm
- Tilting: +90° / -20°
- Optional with MAX static or MAX wi-D

## Remote control console

- With SmartTouch, touch-sensitive joysticks can only be activated by a human touch with integrated TUI (touch user interface) for intuitive imaging

## MAX dynamic

MAX integrated detector in the system table with a large coverage 43 cm x 43 cm (17" x 17")

## Compact system design

- Table length: 210 cm (83")
- Automatic tube detector tracking for smooth exam preparation
- Flexible and safe patient positioning (48 cm-19") and comfortable patient height (up to 98 cm-39") based on your clinical requirements



- MAX mini detector: 24 cm x 30 cm (10" x 12")
- MAX static detector: 43 cm x 43 cm (17" x 17")
- MAX wi-D detector: 35 cm x 43 cm (14" x 17")
- Max. weight capacity: 300 kg





## 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 technical IP rights globally. With about 50,000 dedicated colleagues in over 70 countries, we'll continue to innovate and shape the future of healthcare.

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

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