

# The smart way to invest in patient-side fluoroscopy

## Luminos Agile Max

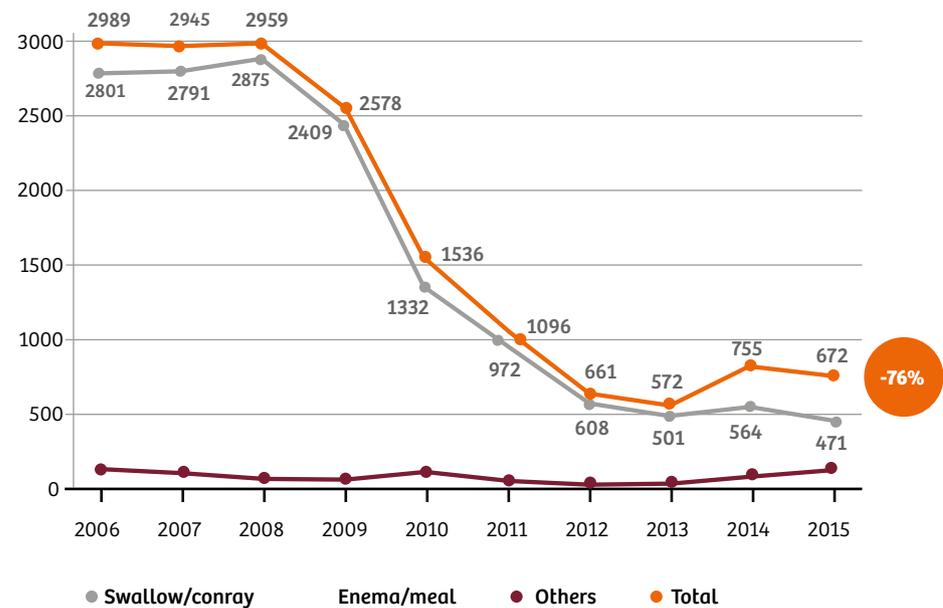


Member  
of the  
MAX family

# Manage discrepancies between supply and demand

Over the last few years, fluoroscopy examinations like barium studies were increasingly replaced by sonography, endoscopy, computed tomography, and magnetic resonance imaging. Even though the number of fluoroscopy examinations is dwindling, clinical institutions have to offer fluoroscopy examinations.

Trend of gastrointestinal contrast studies over the last 10 years<sup>1)</sup>



1) Trends of barium studies performed at the Tata Memorial Hospital, Mumbai, Maharashtra, India over the past 10 years. Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5234156/> last accessed on 09/25/2017

# Enhance system utilization with Luminos Agile Max

For healthcare providers, the pressing question is: How can they improve the return on investment of a potentially underutilized fluoroscopy system?

By combining patient-side fluoroscopy and unlimited radiography, our proven Luminos Agile Max lets you increase system utilization and save on costs for an additional system and room. It delivers high-quality, low-dose dynamic and static images on all types of patients – from small children to obese adults.

The system also offers smart design features, pediatric accessories, and a high level of cybersecurity to keep both patients and their data safe. Benefit from stronger synergies, sharper imaging, and safer use with our 2-in-1 Luminos Agile Max – a smart investment in fluoroscopy.



Standardization  
Savings  
Satisfaction

The  
**MAX**  
effect

**Experience the MAX effect:**  
Multiply your gains in standardization, savings, and satisfaction with Luminos Agile Max.

## Discover Luminos Agile Max

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# Luminos Agile Max at a glance

Cover your  
case mix

Luminos Agile Max is the only patient-side fluoroscopy system combining a flat panel detector with a height-adjustable table. When adding an optional ceiling-mounted tube and bucky wall stand, you can additionally perform virtually unlimited radiography. Whatever you choose: you receive a complete, fully integrated solution with just one control.

Offer low-dose  
imaging

Luminos Agile Max makes it easy to follow the ALARA<sup>1)</sup> principle. Special applications and post-processing features help you keep dose as low as possible, while you can see all anatomical details in clear images to make confident diagnostic decisions for all patients.

Improve your  
processes

With its smart design features and automated workflow, Luminos Agile Max supports you in your daily work: Benefit from safe system operation and efficient workflows and focus on what really matters—your patients.



1) ALARA = As Low As Reasonably Achievable



**Multiply your  
full potential**

Is Luminos Agile Max your first MAX system? Then it is your door opener to the MAX effect. If you already own a MAX system, you can now enjoy the MAX effect of enhanced standardization, savings, and satisfaction. And the MAX effect will grow with every MAX system you add.

**Keep your  
IT secure**

The healthcare environment is becoming increasingly digitalized and connected. Cyberattacks and data theft are just two possible threats. Luminos Agile Max comes with a high level of cybersecurity to support you in safeguarding your IT and sensitive patient data.

**Personalize  
when it matters**

Children have different imaging needs than adult patients. From a very low table height and dedicated low-dose organ programs to special positioning aids, Luminos Agile Max provides all you need to image children safely and efficiently.

# Stronger synergies – with a true 2-in-1 solution

In times of decreasing fluoroscopy examinations, a solution is required to secure a positive return on investment. With our 2-in-1 Luminos Agile Max, you decide how much fluoroscopy and radiography you really need – thus maximizing system and room utilization.

## Opt for a true fluoroscopy system

Luminos Agile Max is a full fluoroscopy system. And thanks to its small footprint and flat panel detector, it takes up little space.

## Adapt Luminos Agile Max to your clinical needs

Easily enhance your efficiency and clinical versatility: Adding a ceiling-mounted tube<sup>1)</sup> and a bucky wall stand<sup>1)</sup>, you can additionally perform virtually unlimited radiography with your Luminos Agile Max. And our wireless MAX detectors<sup>1)</sup> allow you to perform free examinations. You can add these options right from the start or later at anytime.

## Benefit from a high level of integration and a small footprint

Since all components are fully integrated, they are controlled from the same control console and share the same workflow. You also save space because you need just one system cabinet with a small footprint for both generator and power supply.



The optionally available bucky wall stand offers automatic tube monitoring.



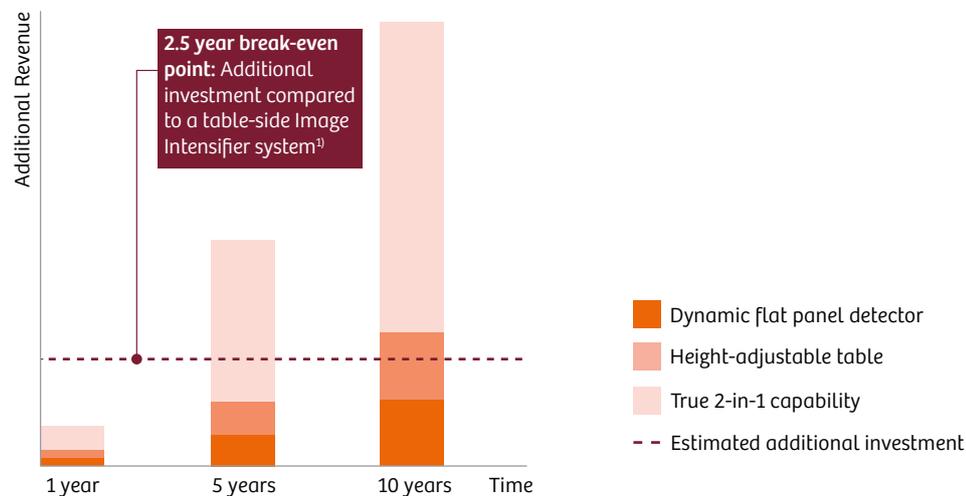
1) Option



### Improve your TCO with detector swapping

With our 2-in-1 Luminos Agile Max, you save an additional system and room. You can further reduce investment costs and increase system availability by swapping our wireless detectors MAX wi-D<sup>1)</sup> and MAX mini<sup>1)</sup> between our multiple MAX systems. After an easy one-click registration, the detectors are ready to be used. They also feature innovative automatic charging when they are in the table or wall stand tray. And because they share the same battery type, you can simply swap the battery if one is running low.

### Reduce your fixed costs with Luminos Agile Max<sup>2)</sup>



2) Development depends on patient volume and reimbursement rates

**“ The advantages are the height-adjustable table, the flat detector for fluoroscopy and the same radiography workflow as a dedicated radiography room, including a wireless radiography detector, ”**

Prof. Dr. Wolfgang Neff  
University Medical Center  
Mannheim, Germany

# Sharper imaging – for fast, confident diagnoses

To make reliable diagnoses, you need excellent visualization of all anatomical structures. Luminos Agile Max delivers clear images at the lowest possible dose. Furthermore, intelligent image acquisition and post-processing help keep examination and reading times short.

## See the anatomical details you need to see

Whether for dynamic imaging like swallow without bolus chase or static radiographic imaging, the large, flat detector of Luminos Agile Max offers excellent coverage. This also allows you to reduce examination time and dose even for challenging examinations. In addition, all components of the image chain are perfectly compatible because they are all from one source: Siemens Healthineers.

## Standardize your imaging workflow

Support your team in confidently acquiring consistent, high-quality images regardless of the complexity of the examination and the knowledge level of the technologist: You can quickly and easily set up the system with your standard settings for radiography and fluoroscopy thanks to the one-click registration. In addition, exposure and post-processing parameters, collimation, and system positions can be predefined in dedicated organ programs. Even for free examinations, the positioning of the tube takes no more guesswork, since the detector angle is displayed directly on the color touchscreen with MAXalign.<sup>1)</sup>

<sup>1)</sup> Option

## Benefit from advanced post-processing

For easy reading and comparison, Luminos Agile Max delivers excellent image quality – always in your preferred image flavor. See improved bone detail and soft tissue contrast in both static low-dose and gridless images. In dynamic imaging, you benefit from enhanced contrast and dynamic noise reduction across the image without loss of detail, even in very bright or dark areas. And when patients only partially cover the image, two semitransparent filters<sup>1)</sup> can help you reduce both examination time and dose.

## Offer safe imaging of children

Children have a much greater sensitivity to radiation than adults. Luminos Agile Max supports you in performing fast, safe, and correct pediatric imaging – assisted by radiation-free positioning<sup>1)</sup> and dedicated parameters for ultra-low dose. With our advanced dynamic noise reduction for pediatrics, you can even perform ultra-low- dose swallow studies for neonates and see anatomical details in high contrast.

*“ This machine is fabulous. The 17” x 17” flat panel detector allows for great digital image quality. It is very easy to use and it is very patient friendly. ”*

**Teresa Cummings**

Lead Medical Imaging  
Technologist, Pella Regional  
Health Center, USA

**DiamondView Plus post-processing:** improved image contrast and detail in static images ...

... as well as in free examinations without a grid



Without DiamondView Plus

With DiamondView Plus



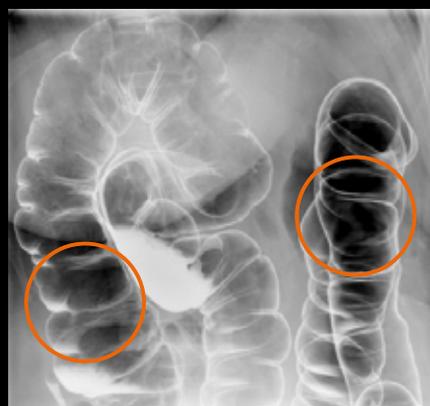
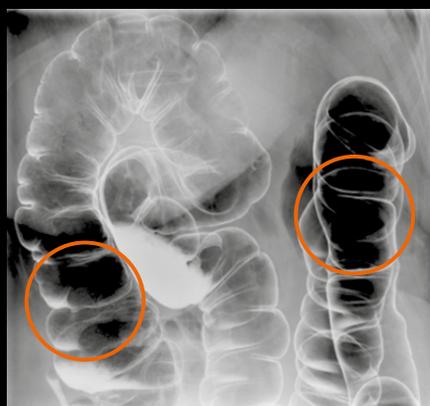
Without DiamondView Plus

With DiamondView Plus

**Dynamic Density Optimization (DDO):** automatic harmonization of dynamic images

**Semitransparent filters<sup>1)</sup>**

**Neonatal swallow study**



Without DDO

With DDO



They can be freely positioned in the image



With dynamic noise reduction

# Safer use – to protect patients and technologists

The safety of patients and staff is especially at risk during patient transfers to and from the system. Luminos Agile Max offers smart design features and intuitive system operation to keep both patients and technologists safe.

*“ We often see older, polymorbid patients. The fact that the table can be adjusted in all directions and raised or lowered from very low to very high positions based on the patient’s bed makes it easy to transfer these patients. And we are not the only ones who appreciate that – the patients do, too.”*

Prof. Stephan Kanzler  
Leopoldina Hospital in  
Schweinfurt, Germany

## Efficiency and safety – no contradiction

Intelligent automation and comprehensive control elements exceptionally accelerate and simplify the positioning of Luminos Agile Max. Its industry-leading safety concept includes the OPTIGrip handle with force sensor control and fully motorized tower movement. The handle is only activated by the touch of a human hand, preventing unintentional system movement. Clear tableside controls and a touch user interface provide fast and easy access to all table movements and imaging parameters – so your staff can concentrate on their patient.

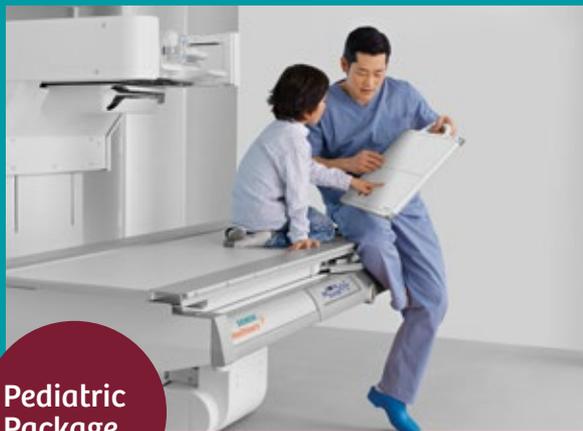


## Enhance the experience of your patients

Accessing or leaving a system can be cumbersome or painful, especially for elderly or disabled patients. Luminos Agile Max helps increase comfort and safety with a low minimum table and stepping height. For the transfer of patients from a trolley onto the system, your staff benefit from the height-adjustable table, longitudinal tabletop movement, and excellent accessibility – even from the back of the system where all mechanical parts are fully covered. The open system design grants full access to the patient without repositioning, even in small rooms.



Luminos Agile Max helps you enhance safety in all respects: whether it is concerning imaging your smallest patients at the lowest possible dose or keeping all your patient data safe.



**Pediatric Package**

**Position even small children safely**

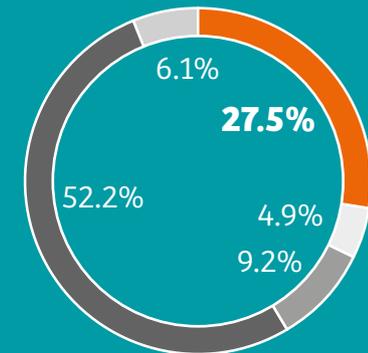
Imaging children who are ill and in pain can be challenging. Luminos Agile Max offers all you need to improve the experience for both children and their families and to provide child-friendly, safe, and efficient ultra-low-dose examinations. Our dedicated accessories for pediatrics help you easily and safely position children and reduce movements during an examination.



**Cyber-security Package**

**Reach a high level of data security**

To protect your IT equipment and patient data from cyberattacks, Luminos Agile Max has been designed to be in compliance with the requirements of the US Department of Defense. Our 2-in-1 system offers this high level of cybersecurity as a standard right from the start. Role-specific user rights combine an easy workflow with a high level of security, because each user has to remember just one password for all MAX systems.



■ Medical/Healthcare 
 ■ Business 
 ■ Educational 
 ■ Banking/Credit/Financial 
 ■ Government/Military

**Data breaches by sector in 2017<sup>1)</sup>**

Security breaches affecting patient data and system IT can cost money and reputation. Did you know that statistically, four new cybersecurity threats emerge every second?

1) Identity Theft Resource Center, Data Breach Category Summary, Report from 11/1/2017. <http://www.idtheftcenter.org/images/breach/2017Breaches/DataBreachReport-2017.pdf>

# The MAX effect – where gains multiply

Whether healthcare providers have to cope with tighter budgets or want to expand their business: they are forced to do more with less. What if there's a smart way to run a radiology more efficiently?

Take a look at our high-performance MAX systems. They all share the same usability concept and imaging technology over the broadest range of clinical applications on the market. And if you combine two or more MAX systems, you'll experience the MAX effect: unique standardization across your fleet, so you can save both time and costs and ultimately boost your level of satisfaction.

Multiply the full potential of your department – with a winning combination of MAX systems.

## Gain standardization

Achieve the same high-quality results throughout sites, rooms, and personnel – always. One MAX platform allows you to standardize workflows and image impressions the way you want. That means faster working and fewer mistakes. Resulting in better outcomes at lower costs.

## Gain savings

Discover the smart way to save with the MAX effect: Save investment costs thanks to detector swapping, reduce the number of rooms required with More-in-1 MAX systems, and keep staff training to a minimum thanks to one usability.

## Gain satisfaction

Increase satisfaction of all stakeholders through offering more patient comfort and lower dose, less stress and more confidence for staff, fast results, and high diagnostic accuracy at lower costs. For consistent high-quality care and enhanced reputation.





More-in-1 system

**Multitom Rax**  
Twin Robotic X-ray



**Mobilett Mira Max**  
High-end digital mobile X-ray imaging



**Multix Fusion Max**  
High-efficiency radiography



**Ysio Max**  
High-performance radiography



More-in-1 system

**Luminos dRF Max**  
2-in-1 remote fluoroscopy



More-in-1 system

**Luminos Agile Max**  
2-in-1 patient-side fluoroscopy

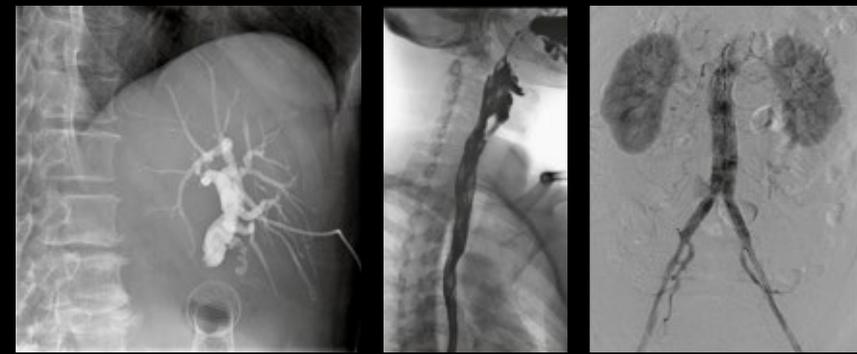
# See anatomical details in high image quality

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

Excellence in radiography applications



Excellence in fluoroscopy applications



# Additional products and services

To help you tap the full potential of your systems, IT, and staff, we offer you a broad range of complimentary products and services.

## Accessory solutions

Choosing a new imaging system may inspire other equipment renewals or additions at your workplace. Our accessory solutions portfolio offers a broad range of complementary products, such as radiation protection clothing/equipment, uninterrupted power supply solutions, contrast media injectors, and positioning aids. We will gladly tailor a package to your individual needs.

## Service and maintenance

Protect your investment over its entire lifecycle and enjoy optimized system availability, consistent image quality, and transparent total cost of ownership. For Luminos dRF Max, we offer you a dedicated service package including:

- Preventive maintenance to increase system uptime
- Remote diagnosis and repair to help keep service costs down
- Corrective maintenance and comprehensive parts coverage, including tube and detector



## LifeNet

LifeNet<sup>1)</sup> is our web-based portal that lets you manage the performance and maintenance of all your Siemens Healthineers systems 24/7. Whether you want to plan maintenance activities, monitor the status of your systems and service requests, or document service history, LifeNet gives you full control and confidence at all times. Ease your workday and stay calm, no matter what's happening around you.

## PEPconnect – your smarter connection to knowledge

Staffing shortages, cost constraints, greater workloads – and all the while, you have to deliver an ever higher quality of care. One key to overcome these challenges is further education. With our online e-learning experience PEPconnect<sup>1)</sup>, you can boost your learning – anytime, anywhere, and from any device.

1) Subject to country-specific availability

# Technical specifications

Discover how our 2-in-1 Luminos Agile Max lets you benefit from stronger synergies, sharper imaging, and safer use.



## MAX mini detector<sup>1)</sup>

Wireless  
Size: 24 cm x 30 cm (10" x 12")  
Weight: 1.6 kg (3.5 lbs.)  
Thickness: 16 mm (0.6")

## MAX wi-D detector<sup>1)</sup>

Wireless  
Size: 35 cm x 43 cm (14" x 17")  
Weight: 3.3 kg (7.3 lbs.)  
Thickness: 19 mm (0.7")



## Vertical imaging

Wide patient opening: 60 cm (24")

## syngo FLC

## Touch user interface

for fast and easy access to all table movements and imaging parameters

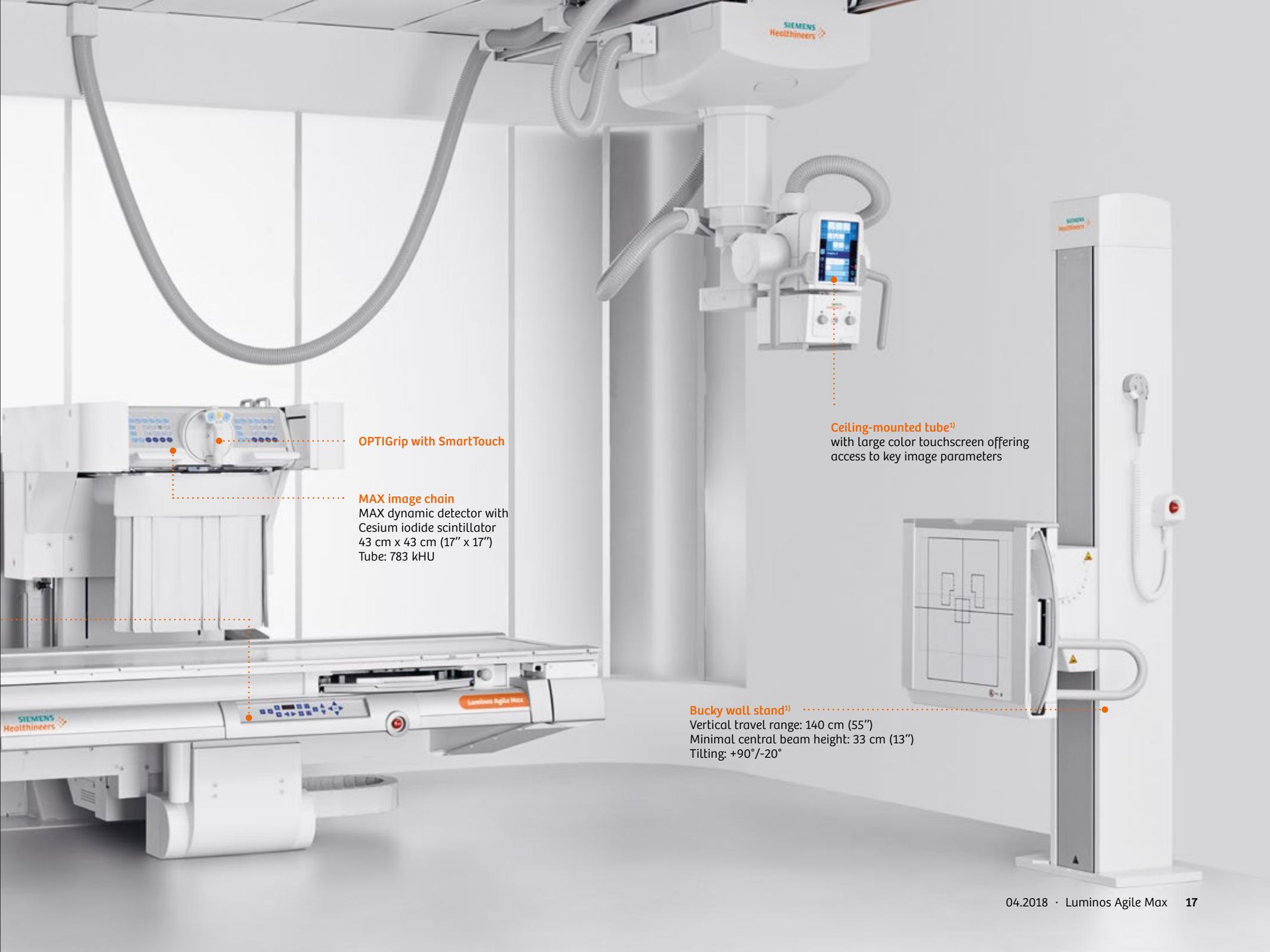
## Comprehensive tableside controls

for fast and easy access to all table movements and imaging parameters

## Table

Height: min. 65 cm (26"), max. 112 cm (44")  
Weight capacity: up to 275 kg (606 lbs.)  
Extra-wide tabletop: 80 cm (31.5")

<sup>1)</sup> Option



**OPTIGrip with SmartTouch**

**MAX image chain**  
MAX dynamic detector with  
Cesium iodide scintillator  
43 cm x 43 cm (17" x 17")  
Tube: 783 kHU

**Ceiling-mounted tube<sup>1)</sup>**  
with large color touchscreen offering  
access to key image parameters

**Bucky wall stand<sup>1)</sup>**  
Vertical travel range: 140 cm (55")  
Minimal central beam height: 33 cm (13")  
Tilting: +90°/-20°

# Why Siemens Healthineers?

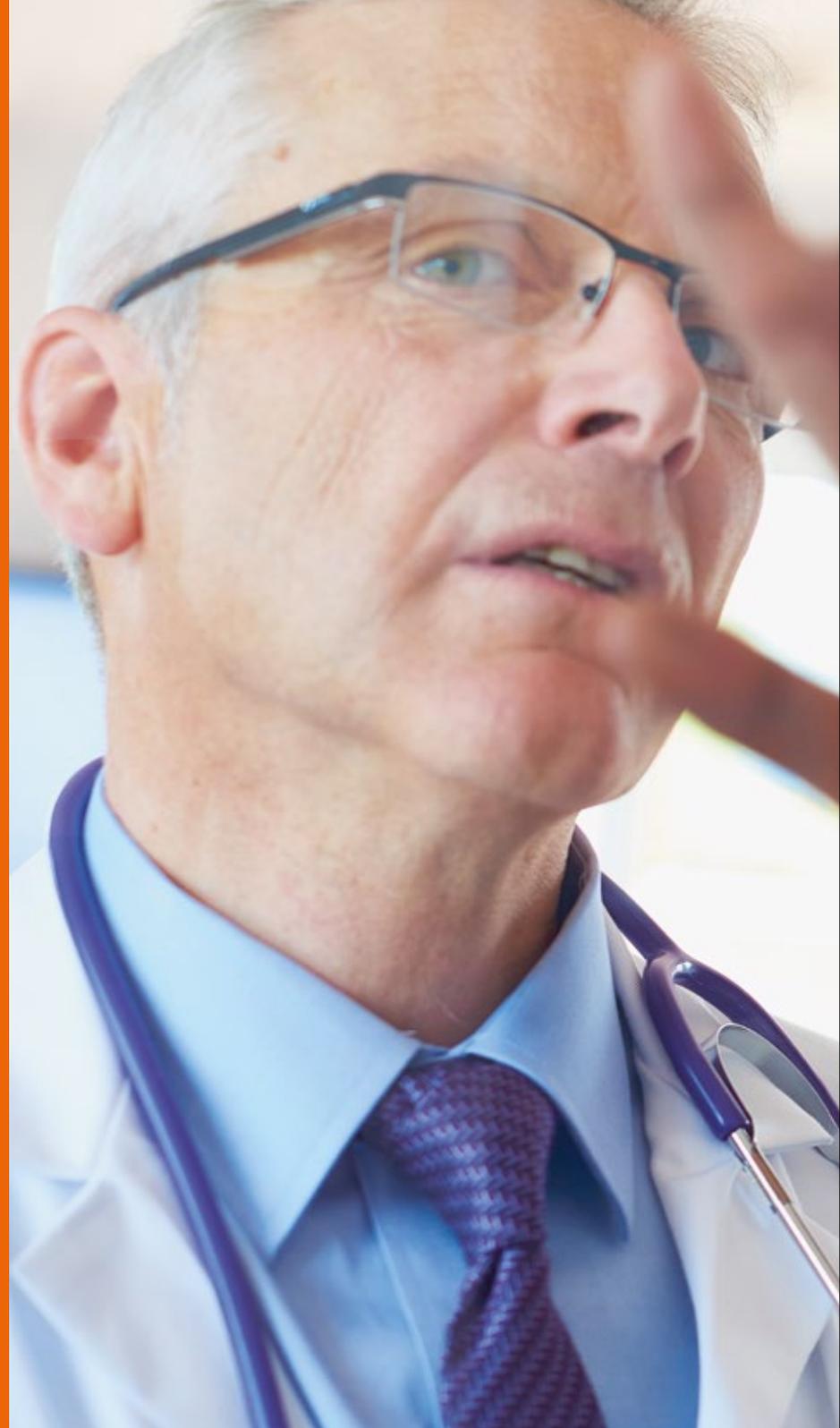
At Siemens Healthineers, we enable healthcare providers to achieve better outcomes at lower cost by expanding precision medicine, transforming care delivery, improving patient experience, and digitalizing healthcare.

Healthcare providers around the world have long relied upon our engineering excellence – leading-edge, high-quality medical technologies across a broad portfolio. Our technologies touch an estimated 5 million patients globally every day.<sup>1</sup> At the same time, they help hospital departments to continuously improve their clinical, operational, and financial outcomes.

We now consolidate this unprecedented volume of data and insights and turn them into pioneering enterprise and digital health services. With those, we maximize opportunities and share risks of your entire health system.

Partnerships are built on people. With Siemens Healthineers there is no team more committed and more connected than we are to realize your success together.

1) Siemens AG, "Sustainable healthcare strategy – Indicators in fiscal 2014", page 3-4





Luminos dRF 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.

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

The information in this document contains general descriptions of the technical options available and may not always apply in individual cases.

Siemens Healthineers reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Healthineers 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 may recycle certain components where legally permissible. For recycled components we use the same extensive quality assurance measures as for factory-new components.

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

The system will be branded Siemens Healthineers from February 2018 onwards. The exact availability depends on the individual country's system release.

The statements by Siemens Healthineers' described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

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