



The digital 2-in-1 solution for fluoroscopy and radiography

AXIOM Luminos dRF

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Dynamic imaging

Fluoroscopy/ angiography

AXIOM Luminos dRF supports a vast spectrum of fluoroscopic and angiographic applications.

Fluoroscopic examinations:

- Gastrointestinal examinations
- Urogenital tract examinations
- Endoscopy
- Arthrography
- Venography
- Lymphography
- Myelography

Angiography examinations with:

- digital angiography
- digital subtracted angiography (DSA)*

* Option

2-in-1 imaging efficiency





Static imaging

Radiography

AXIOM Luminos dRF supports an extensive range of radiographic examinations.

Skeletal radiography:

- Skull
- Thorax
- Abdomen
- Vertebral column
- Pelvis
- Upper extremities
- Lower extremities

Special applications in radiography:

- Tomography*
- Long image display*

* Option



AXIOM Luminos dRF

One single system for dual utilization

AXIOM Luminos dRF highlights

2-in-1

One single system for dual utilization

43 cm x 43 cm

Large 43 cm x 43 cm (17" x 17") flat detector with excellent coverage for a wide array of applications

48 cm

Flexible table height adjustment starting at a low 48 cm (19")



As a true 2-in-1 digital solution, AXIOM Luminos dRF offers you the advantages of both digital fluoroscopy and digital radiography in a single system.

Featuring a large 43 cm x 43 cm (17" x 17") dynamic flat detector, AXIOM Luminos dRF delivers excellent distortion-free fluoroscopy and radiography exposures. Its height adjustable table starts at a low 48 cm (19"), enabling convenient and comfortable examinations for patients and medical staff. The dual utilization of AXIOM Luminos dRF provides many possibilities to maximize workflow efficiency in fluoroscopy and radiography – in one room.

"AXIOM Luminos dRF is one of the most complete X-ray systems. With its numerous functionalities and its innovative large coverage flat detector, it can be used for many different examinations ranging from fluoroscopy studies to high-resolution radiographic imaging, which allows us to easily react to changing examination mixes."

Professor Dr. Yvan Palmers
Head of the Medical Imaging Department
Ziekenhuis Oost-Limburg, Genk, Belgium

43 cm x 43 cm detector coverage

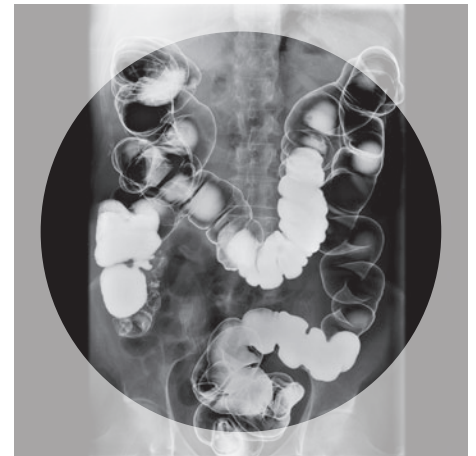
Flat detector highlights

- Excellent coverage with 43 cm x 43 cm (17" x 17") flat detector
- High resolution of up to 3.4 lp/mm for dynamic and static images
- Crisp distortion-free images with excellent resolution
- Wide dynamic range offers excellent display of density variances

I.I. 33 cm (13")



I.I. 40 cm (16")



Combining superb coverage with exceptional image quality, the flat detector of AXIOM Luminos dRF delivers brilliant images in a large format – for both dynamic and static images.

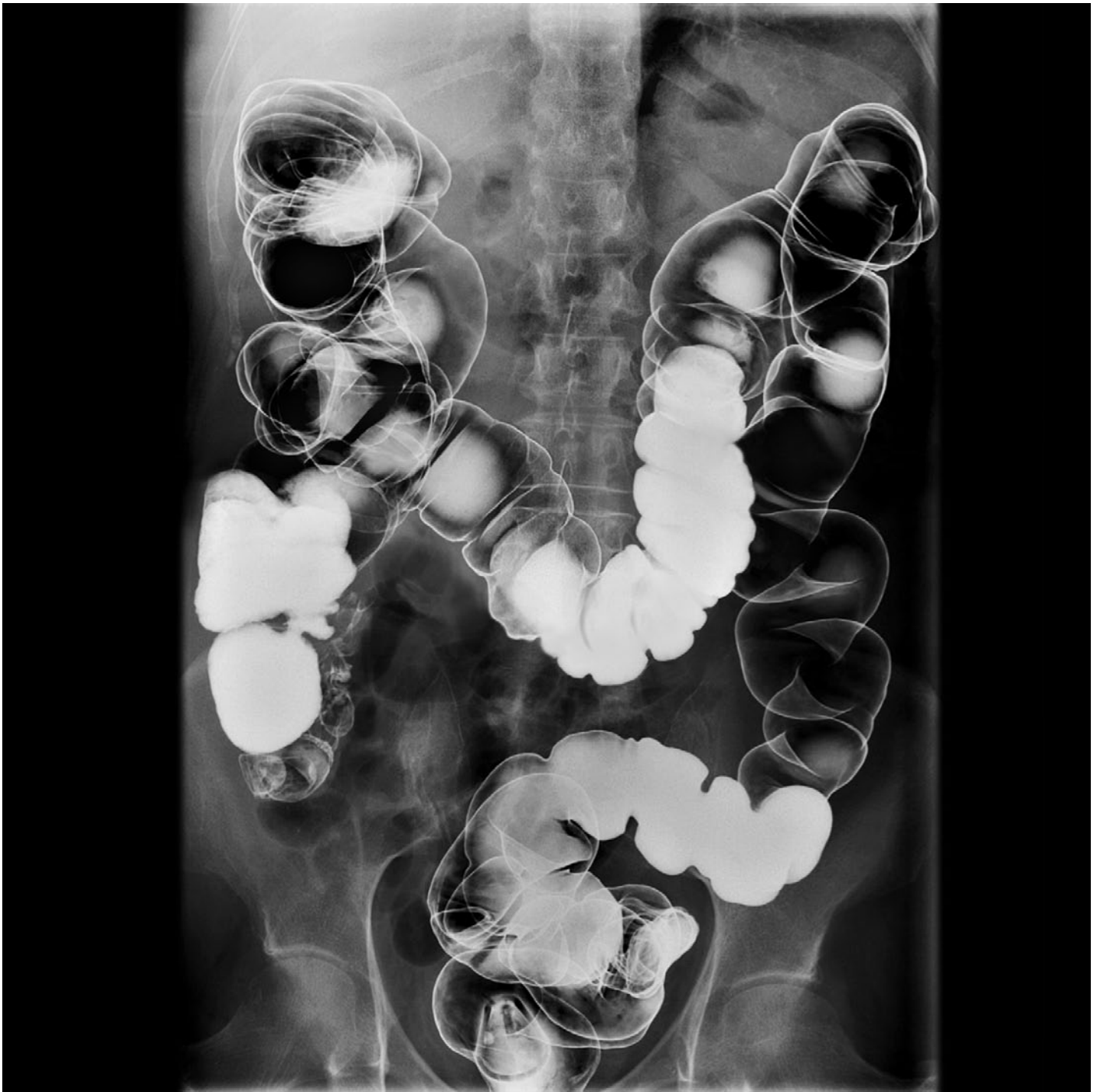
Large view of information

The large 43 cm x 43 cm (17" x 17") flat detector delivers a big picture full of valuable clinical information across the entire image. Its coverage is 50% larger than an image intensifier of 40 cm (16") diameter.

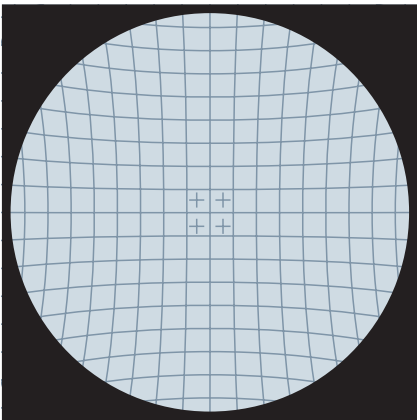
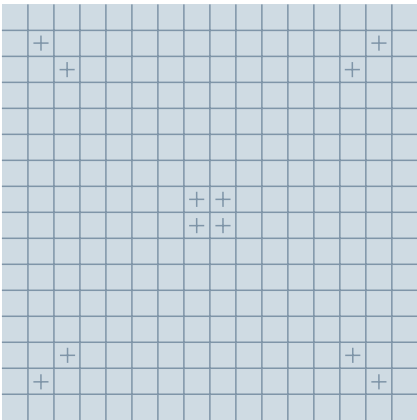
Excellent flat detector design

AXIOM Luminos dRF features a flat detector with CsI scintillators that delivers completely distortion-free dynamic sequences and static images. Its high-resolution views with up to 3.4 lp/mm easily meet the demands of today's radiographic imaging.

Located directly under the tabletop, the flat detector reproduces very small details of the anatomy, keeping object magnification to a minimum. The detector's high dynamic range offers excellent visualization of images with wide density variances.



The large 43 cm x 43 cm (17" x 17") flat detector delivers brilliant image quality, even in all four corners



Distortion-free imaging with FD technology



Dedicated radiography
with long image display*

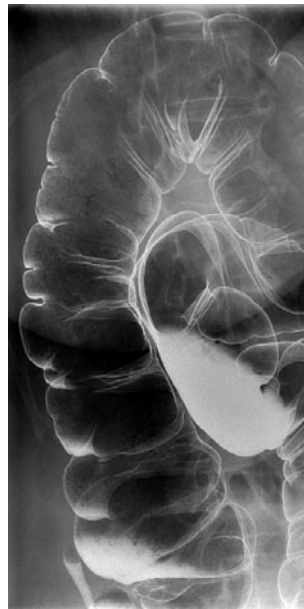
Without DiamondView Plus



With DiamondView Plus

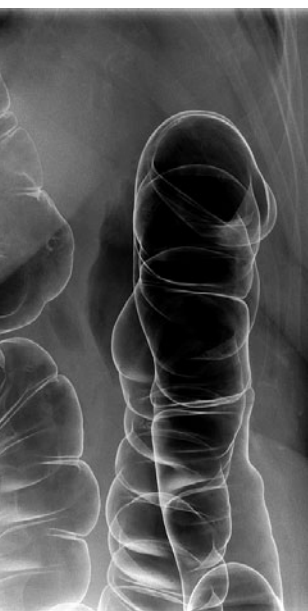


Without DDO



With DDO

Details to support accurate diagnoses



AXIOM Luminos dRF incorporates enhanced technologies that are unique to the Siemens image processing chain. Advanced imaging and postprocessing functions such as DDO and DiamondView Plus offer superb diagnostic support.

FLUOROSPOT Compact brilliance

Intuitive and easy to operate: the FLUOROSPOT Compact digital imaging system transforms acquired information into brilliant images. Comprehensive postprocessing functions support accurate diagnoses directly at the monitor.

Sharpen your contrast

The unique Siemens imaging chain of AXIOM Luminos dRF comprises various advanced postprocessing applications. DiamondView Plus reduces noise while increasing detail contrast and sharpness of radiographic images. DDO improves image contrast and detail recognition for critical regions of fluoroscopic images.

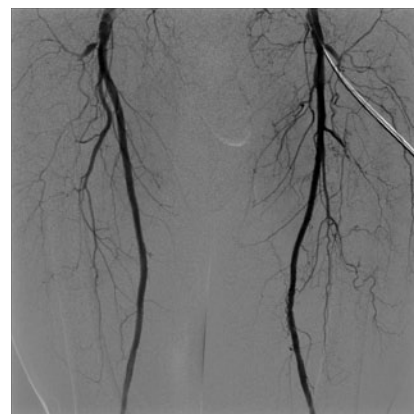
Dominant measuring fields are selected to suit anatomical regions and automatically adapted during zooming. Thus, even high contrast objects are displayed with brilliant image quality.

Advanced imaging

AXIOM Luminos dRF can be optionally equipped to perform digital subtraction angiography (DSA)*, long leg and spine acquisitions* as well as tomography*, providing even greater imaging versatility.

Image quality highlights

- Cutting-edge postprocessing features
- DiamondView Plus for enhanced contrast of radiographic images
- Dynamic Density Optimization (DDO) for harmonization and edge enhancement
- Advanced applications for increased imaging versatility



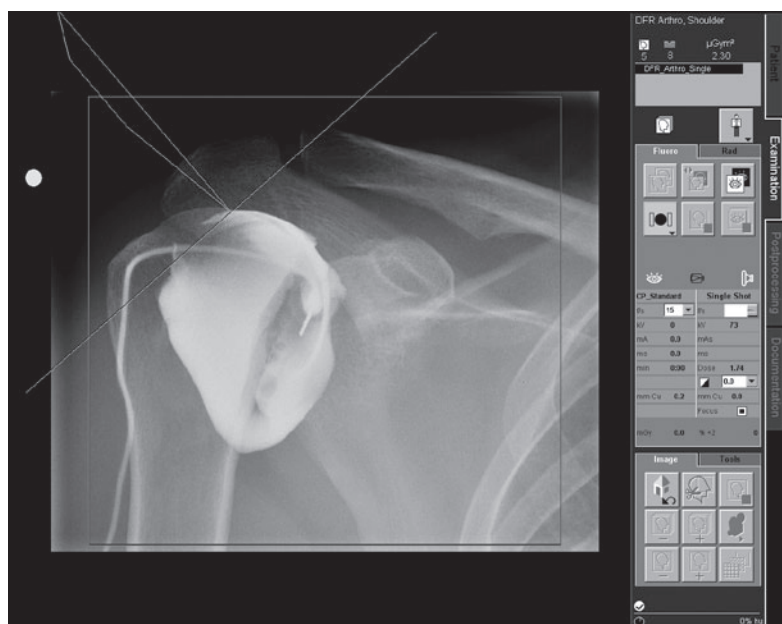
Another option to expand your applications: digital subtraction angiography*

* Option



Patient CARE that's personal

With its unique dose reduction program CARE (Combined Applications for Reduced Exposure), AXIOM Luminos dRF provides comprehensive radiation reduction for patients and medical staff alike. The high detective quantum efficiency (DQE) of the detector also minimizes radiation dose.



Dose reduction highlights

- Detector with high detective quantum efficiency (DQE)
- Automatic insertion of copper filters
- Preset organ programs
- 4 different pulsed fluoroscopy modes
- Removable grid
- Radiation-free electronic collimation and repositioning
- Large detector coverage requires fewer images

Removable grid

The grid is easily removed for examinations on thin and pediatric patients as well as extremities. Preset exposure parameters of organ programs can be adjusted during the examination to suit various patient types.

CAREMATIC automatically optimizes exposure parameters during fluoroscopy without user intervention.

CAREVISION allows you to select various frame rates for pulsed fluoroscopy ranging from 3 p/s, 7.5 p/s, 10 p/s and 15 p/s for optimized low dose imaging while accommodating anatomical movements.

CAREFILTER keeps entry skin dose to a minimum by filtering out low energy radiation with copper filters that are automatically positioned based on the patient's anatomy.

CAREPROFILE* enables radiation-free electronic graphical positioning of collimators and semi-transparent wedge filters* using the last image hold (LIH) for orientation.

CAREPOSITION* is a unique Siemens radiation-free patient repositioning feature that uses electronic visual aid for control. When the table or FD is moved to re-center the region of interest, the new centering is maintained without radiation.

Get a second look

FluoroLoop* lets you store and review up to 150 seconds of retrospective dynamic sequences, thus storing important sequences and reducing the need for screening of patients.

* Option



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AXIOM Luminos dRF

A low table height of 48 cm

AXIOM Luminos dRF is designed to minimize the physical effort and stress of procedures for patients and medical staff.



Table convenience

The table's extremely low height setting of just 48 cm (19") enables easy patient positioning on the system. With a variably adjustable height of up to 98 cm (39"), it allows for optimal working level positioning. Some radiographic examinations can even be conducted with the patient seated in a chair or wheelchair.

Effortless patient transfers

All system components are quickly brought into two comfortable park positions – upright and supine – at the push of a button for simple and easy patient transfers to and from the system.

High weight capacity

The table supports full tilt functionality even when conducting examinations on patients weighing up to 230 kg (500 lbs). A sturdy attachable footboard supports the same weight.

Giving new meaning to patient- and user-friendliness

Workflow highlights

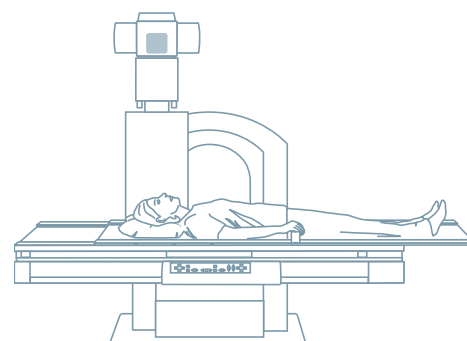
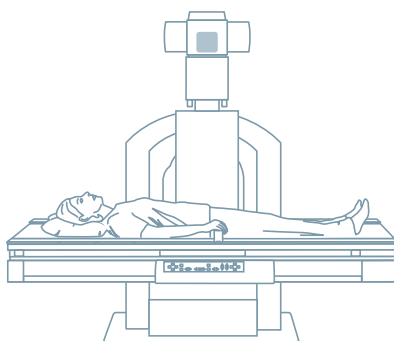
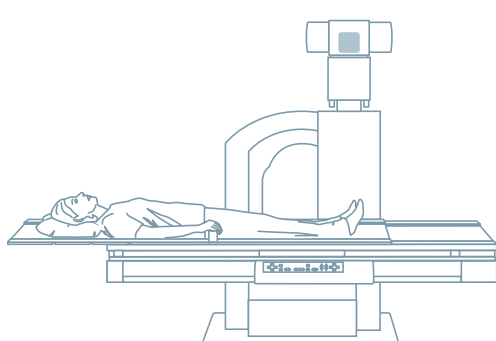
- Adjustable table height from a low 48 cm to 98 cm (19" to 39")
- Large tabletop and wide scanning range for effortless patient coverage
- High table weight capacity of up to 230 kg (500 lbs)
- Excellent patient access from all sides
- Two convenient patient transfer positions
- Intuitive remote control and comprehensive tableside functions



Excellent patient access, even from the rear



Combining a wide variety of convenient system handling and design features, AXIOM Luminos dRF gives new meaning to patient- and user-friendly examinations.



User-friendly remote control console with touch user interface for easy access to all parameters



Easy patient-side access to all table movements and more

Compact, open design

Providing excellent patient access from all sides, even from the rear of the table, AXIOM Luminos dRF enables comfortable patient positioning and transfers to and from the stretcher.

Complete body coverage

With a large tabletop measuring 210 cm x 80 cm (83" x 32"), AXIOM Luminos dRF easily accommodates very large patients. The exceptional travel range of the receptor and tabletop enables complete body coverage with virtually no need to reposition the patient. The 8-way travel of the tabletop includes wide bidirectional movements of up to 80 cm (32").

Intuitive controls at your fingertips

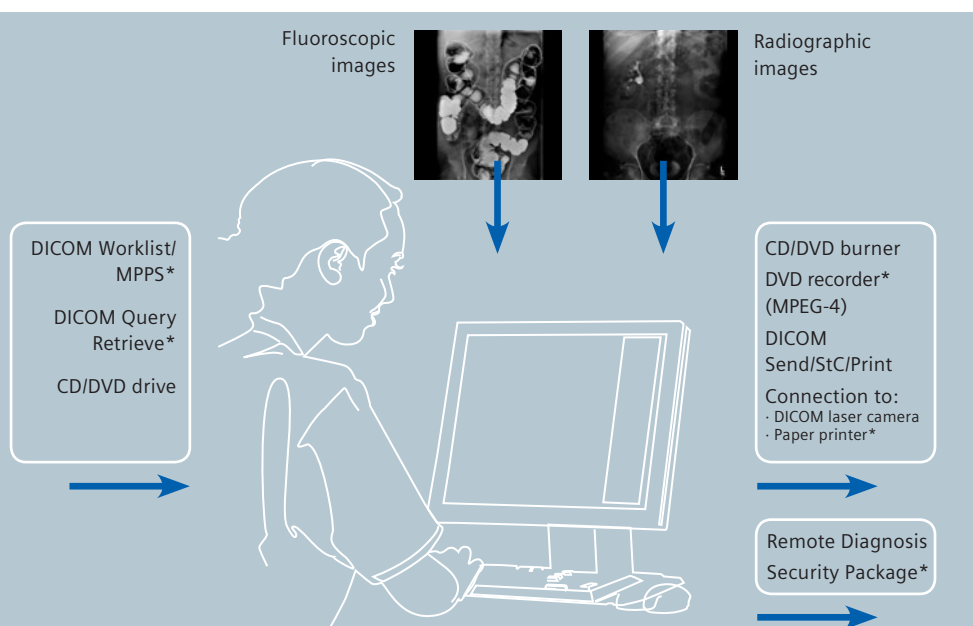
The compact control console with intuitive touch user interface allows easy remote operation, including organ programming. Comprehensive tableside controls offer great patient-side positioning convenience. A mobile control console* for the examination room also supports full system control close to the patient.

* Option

Minimize work steps, maximize workflow



The total benefits delivered by AXIOM Luminos dRF is greater than the sum of its various leading-edge technologies. Besides multiple convenient system control functions, it is combined with the FLUOROSPOT Compact imaging system to support seamless data management from a single workstation. As a DICOM-compatible system, AXIOM Luminos dRF gives you complete network integration for fluoroscopy and radiography.



Efficiency highlights

- Network integration for both fluoroscopy and radiography
- Retrieve patient data and schedule examinations with DICOM Worklist*
- No more cassette handling and film development
- Electronic data storage and archiving
- Easy data transfer, also with external partners
- Seamless, effortless data exchange with FLUOROSPOT Compact

2-in-1 efficiency

With AXIOM Luminos dRF, the time needed to perform mixed fluoroscopy and radiography examinations is noticeably reduced. A scout radiograph prior to the fluoroscopy procedure no longer requires a trip to a separate radiography unit.

Fast takes

Time-consuming cassette handling and film development are also history. Images are available for review virtually instantly, shortening examination times for you and your patients.

Minimize work steps

AXIOM Luminos dRF combines both fluoroscopic and radiographic images in the same patient folder and in the order of acquisition for fast accurate diagnostic support. Postprocessing can be performed directly on the system or separate workstation.

One-stop workstation

The FLUOROSPOT Compact imaging system is a highly user-friendly, one-stop workstation for the complete examination. With its intuitive, easy-to-learn user interface, FLUOROSPOT Compact walks the user through the examination in four simple steps:

1. Registration via DICOM Worklist or manually at the system
2. Examination and organ programming
3. Postprocessing, including image processing and measurements
4. Documentation, e.g. to send, print or to store data on CD/DVD

Optimized connectivity

Thanks to its DICOM 3.0 capabilities, AXIOM Luminos dRF can be seamlessly integrated with existing HIS/RIS and PACS.

HIPAA security

The security package* enables advanced system user management in compliance with HIPAA regulations.

* Option

Flexibility that pays off

Offering numerous utilization capabilities and tremendous potential for substantial time, money and space savings, AXIOM Luminos dRF provides the flexibility that offers great returns.

Value highlights

- Highly versatile system for fluoroscopy, radiography and even interventional procedures
- Wide range of advanced clinical applications
- 2-in-1 system utilization
- Can be tailored for individual working preferences
- Saves space and helps reduce costs
- Shorter examination times



AXIOM Luminos dRF can be flexibly configured to meet individual working preferences and clinical needs

2-in-1 utilization concept

Whether used as a one-room solution for both imaging techniques, or simply as a backup system in the radiography room, AXIOM Luminos dRF is a strong addition for virtually any clinical environment. The system saves space and helps reduce time and money spent on training, maintenance and technical services.

Individual configurations

Depending on individual working preferences, the system can be equipped with various table and generator options, a compression device*, flexible monitor configurations and a wide range of accessories* for specific applications such as pediatrics or urology.

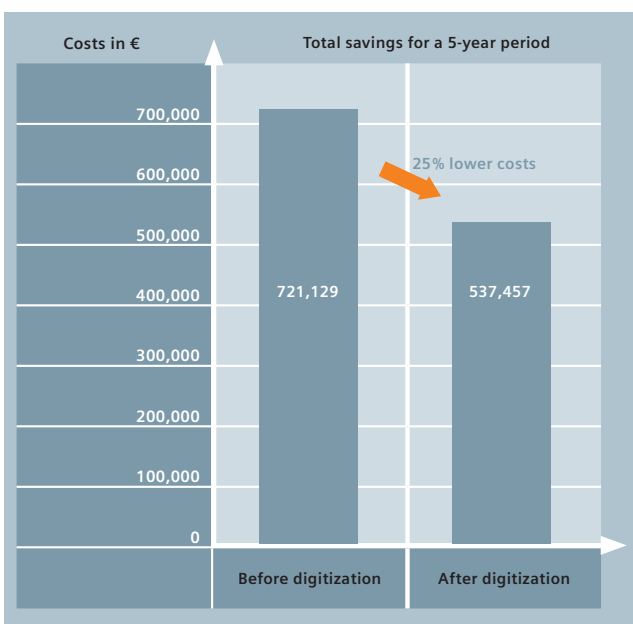
Advanced applications for increased utilization

AXIOM Luminos dRF can be variably configured for extended system utilization. For example, the system can be optionally equipped to perform tomography*, DSA* or long leg and spine scans* for even greater imaging versatility. Its future-oriented design supports flexible system utilization for various examination profiles.

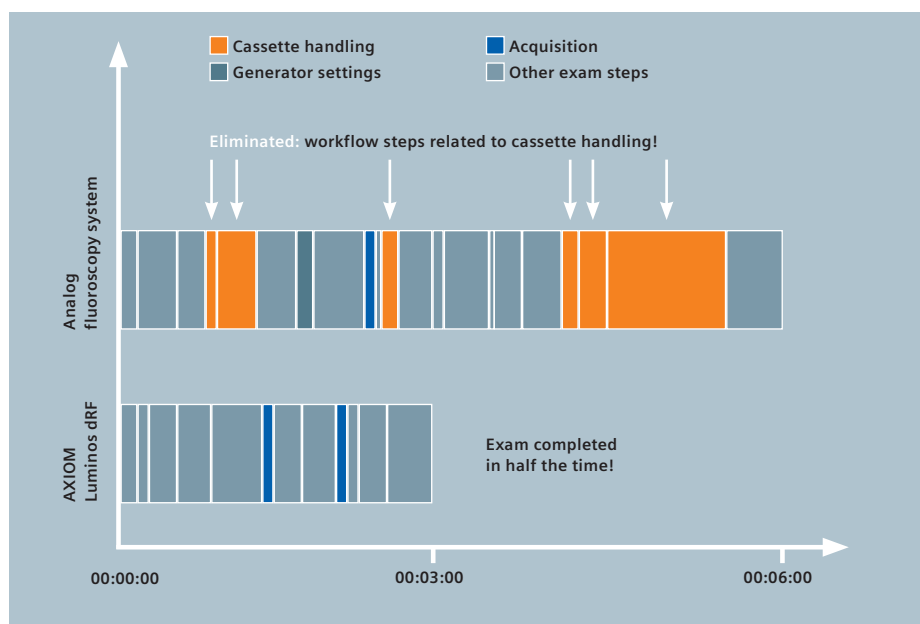
* Option



Sophisticated compression mechanism with park position outside of the X-ray beam



Average savings of € 183,672 per year translate into projected total savings of € 918,361 over a 5-year period



With AXIOM Luminos dRF, tiresome cassette handling is eliminated, greatly reducing the examination time by more than half

Case in point: Genk

In 2007, the radiology department at the Ziekenhuis Oost-Limburg in Genk, Belgium chose to install an AXIOM Luminos dRF system to replace several analog systems. The decision paid off both clinically and financially. The AXIOM Luminos dRF system not only performs fluoroscopy examinations faster and more efficiently. It also doubles as a radiography system, thereby saving space. As a fully digital system, there are fewer costs for consumables and materials. The system also allows for more flexible utilization of medical staff.

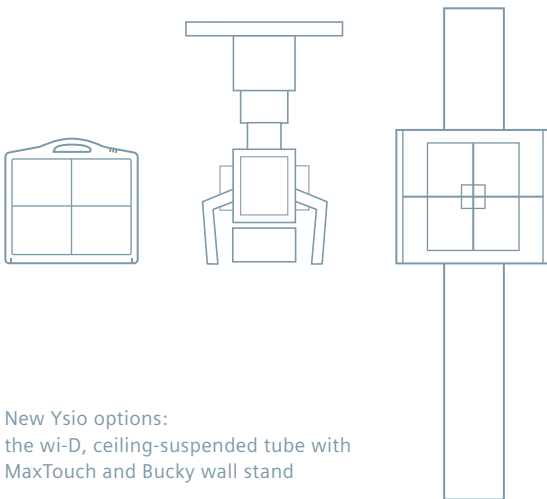
Fewer interruptions, smoother procedures

Workflow benefits are apparent right from the start of the examination. The system's ergonomic design makes patient positioning much easier. In fact, a workflow evaluation has shown the system to be almost twice as fast as cassette-based units**.

** Data on file. Individual results may vary.

Unlimited projection flexibility

AXIOM Luminos dRF can now be combined with Ysio flexibility options, including the wireless detector (wi-D™)*, the ceiling-suspended tube* with MaxTouch user interface and the Bucky wall stand* – offering you virtually limitless projection flexibility.



New Ysio options:
the wi-D, ceiling-suspended tube with
MaxTouch and Bucky wall stand

Unlimited digital imaging

When equipped with the wi-D*, AXIOM Luminos dRF offers highly flexible, wireless digital imaging anywhere in the room, such as conducting examinations on patients in wheelchairs.

The ceiling-suspended tube* with MaxTouch places exposure values directly at your fingertips for fast, convenient access during the examination. All Ysio flexibility options can be individually configured for various room and space needs of clinics.

The wi-D can also be used in combination with the Bucky wall stand* to support the complete spectrum of upright examinations such as chest, lateral cervical spine, etc.

* Option

Life keeps you going

The wireless detector (wi-D) lets you bring the imaging source to the patient, thereby offering you tremendous examination flexibility and versatility



The ceiling-suspended tube with MaxTouch user interface lets you conveniently adjust key system control functions on the fly



When combined with the Bucky wall stand, AXIOM Luminos dRF supports the complete spectrum of upright examinations



In fluoroscopy and radiography, state-of-the-art imaging systems play an increasingly important role for providing critical support. With a digital 2-in-1 solution such as AXIOM Luminos dRF, upholding a seamless workflow with maximized operational security is essential. Our proactive service solutions do just that by helping you increase your system availability, reliability and workflow efficiency.

Siemens Guardian Program™ offers continuous real-time remote system monitoring. Through ongoing supervision of your AXIOM Luminos dRF for possible deviations from current norms, the Guardian Program provides a high level of system availability, detecting and resolving system errors even before malfunctions occur.

Siemens Remote Service, the efficient and comprehensive infrastructure for the complete spectrum of medical equipment-related remote services, powers all our proactive services.

For more information about our service offerings, go to: www.siemens.com/uptime-services

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