

GE Healthcare

# Discovery\* RF180

PRODUCT DATA SHEET

Remote X-Ray Imaging R&F System



# System Overview

## One system designed for all.

Flexible, precise, and low dose, the Discovery RF180 is a powerful remote imaging system that fosters great diagnostic certainty, all from the first image. Simple and intuitive, it provides a streamlined clinical workflow optimized for quality-infused value-based care. It's also one of the only systems that can conduct a wide variety of exams, including tomosynthesis and pasting, helping ensure unprecedented performance, uptime, and fast ROI.

### Main features

- Table-top height adjustable
- Source Image Distance (SID) up to 180 cm (71")
- Patented autofocusing grid
- Total patient accessibility with open design rear access
- Maximum patient's weight with full movements 266 kg (586 lbs)
- Innovative table joysticks controls
- Smart digital system with multi touch screen display
- Radiography and fluoroscopy 43 x 43 cm digital detector (17 x 17")
- Full DICOM functionality
- Advanced Applications available
- Upgradeable with advanced applications

### Main applications

- Gastroenterology
- Skeleton
- Thorax and lungs
- Pediatrics
- Urology and gynecology
- Emergency/traumatology

# System Features

## All about easy. Your day streamlined.

Serve a high patient volume, optimize the patient experience, and help deliver the best care possible with fast and streamlined workflow. Intuitive touchscreen user interface and AutoRF simplify exam set-up with just a few clicks and less need to physically move equipment. Large, elevating easy-access table with touch controls accommodates a variety of patient sizes and ages and enables easy positioning. Features true rear accessibility to facilitate patient transfer and radiologist approach.

### Exam table

90/90 universal remote system table with elevating movement independent from the table tilting and designed for 43 x 43 cm (17 x 17") dynamic flat panel. Minimum table height of only 47cm. Single suspended patient tabletop with FULL rear access to the patient that simplifies the transfer from/to the stretcher, ensures immediate intervention and less operator's physical effort. X-ray tube/detector support with maximum longitudinal travel, coupled with longitudinal motorized table movements, yield patient coverage up to 305 cm.

X-ray tube/detector speed adjustable in continuous mode by the console control joystick. Movement also controlled by fixed speed from the frontal detector support console.

### Exams on stretched patient

Radiological examinations can be achieved outside the table-top and on stretched patient.

### Operator interface

Main contact points between operator and system.

### Remote console

- Innovative user-friendly table control console
- Control console with joysticks and stop push button to assist the operator in the most suitable table positioning



### Smart and highly innovative digital system

- Smart integrated 23-inch monitor touch screen display
- Generator, table, and digital system controls are integrated in the monitor display.
- Multi touch gesture to optimize the workflow - easy to customize

The system stores acquisition, processing, and visualization parameters related to anatomic part and patient size. This means single-screen control of the total examination, avoiding additional system interactions.

Post-processing functions are available to modify the images and simplify its management.



### Table integrated keyboard

- Table movements control
- X-ray tube assembly movement control
- X-ray collimator beam control
- Emergency push stop



### Lead free collimator with touch screen display

- Touchscreen interface display with collimator controls integrated.
- Table and X-ray tube assembly movement controls
- Touch screen collimator display
- LED control, blades opening/closing control; Source Image Distance (SID) control (step less adjustable), automatic/manual control. Additional filtration
- Key button screen change
- Table movement controls: elevation, transversal, longitudinal patient table top movements
- X-ray tube assembly
- Tube inclination angle
- Orthogonal X-ray tube positioning



# Auto RF Features

Suite of features to further simplify your workflow includes:

## Auto-protocol assist

System will automatically transition directly to the Acquire screen when the protocol code downloaded from the HIS/ RIS (automatically performed with worklist refresh) matches the exam code contained in the protocol database. This tool eliminates the user steps required to select patient exam types and initiate an exam.

## Auto positioning

The table automatically reaches a pre-set anatomical position if the auto-positioning mode is enabled by the service team during in-stallation.

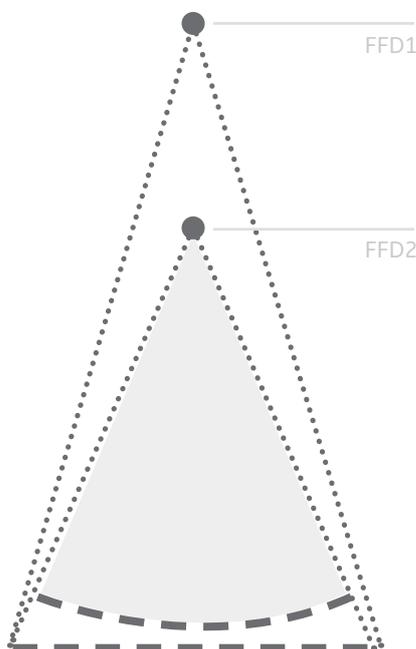
The available positions are: automatic table tilts, X-ray tube drive position, longitudinal detector position, patient table-top lateral position, source image distance SID, collimation and grid parameters.

## Auto field of view

Auto Field of View enables the user to pre-define the collimation size on an individual view basis.

## Auto focusing grid

Grid with an exclusive autofocusing device that automatically set the correct grid focalization according to the selected SID. Easy grid removing to allow dose reduction.



## Auto image processing

High-definition images display optimized within a short time. In acquisition sequence, real-time display preview format. After acquisition, automatic final format images availability.

## Compressor device (optional function)

Compressor device with motorized parking. Mechanical and electrical safety (double safety).

# All about confidence – Diagnostic Benefits

This intuitive, powerful imaging tool also helps to deliver great diagnostic certainty. It has been reimagined with the latest premium FPD low-dose technology, specific pediatric features and radiation-free collimation and positioning to minimize dose. With the ability to perform a wide range of exams, and advanced apps like DSA, tomosynthesis and auto image paste the Discovery RF180 is designed to deliver fast, high-quality images.

## Tomographic technique

The remote-controlled table performs high level tomographic exams. The digital control assures precision with four different angles, increasing and decreasing automatic cutting plane.

## Auto image paste (optional function)

The auto image paste function is an optional module of the table system that involves the automatic acquisition and recombination of a set of radiography images. The pasted image has all the source pixels; it can be viewed on the monitor, processed, printed or sent via network by usual digital image system functions. The system includes the spine and leg automatic reconstruction with patient lying or standing. The operator can program the images reconstruction with selectable length of 60 – 90 – 120 cm (24 – 35 – 47”).

## Tomosynthesis (optional function)

The system offers the possibility of a high innovative diagnostics examination in the medical field: "tomosynthesis". The application range vary from chest, abdomen and orthopedics examination. The tomosynthesis function acquires images that allow the analysis of an entire volume using a series of low dose rapid exposures.

Tomosynthesis involves a series of x-ray exposures during a single tomographic sweep with a fixed image receptor; the system then reconstructs the data to visualize multiple level planes (slices) from the surface of the image receptor up through the imaged anatomy. It removes overlapping/overlying structures and enhances the conspicuity of anatomy in the different slices. Thanks to the innovative approach in image acquisition, it is possible to achieve very high-quality images.

## Digital subtraction angiography (DSA) (optional function)

The DSA option gives the following possibilities:

- Real-time acquisition images in subtract mode.
- Possibilities to program up to six different phases, each phase can be set timing and acquisition rate.
- Road-mapping function with maximum opacity function and subtraction.
- 8 reference images selectable on dedicated monitor (reference monitor).
- Review runs sequence in cine loop mode.
- Easy change of mask image in post-processing mode with direct result viewing.
- Calibration measurement directly on catheter.
- Percentage stenosis calculation.

## Performance amplified – Maximize room utilization

Boost uptime and patient volume to accelerate ROI with an all-in-one system that supports a wide range of examinations. Designed to keep your fluoroscopy department busy, the Discovery RF180 can perform well beyond simple radiography and fluoroscopy. Your system utilization is optimized by the following features:

- Variable SID with maximum 180 cm permits chest exams with no additional equipment
- One of the few systems to accommodate bariatric exams
- Accessible equipment for mobility-impaired patients, from pediatric to geriatric
- Extended movements enable standing lower limb exams without need for patient to climb
- Supports a wide variety of advanced exams (tomosynthesis, auto image paste, DSA)
- Remote service capabilities to quickly identify problems and resolve issues

EXAM TABLE	
<b>Tilting</b>	Motorized from + 90° to – 90°
<b>Tilting speed</b>	Variable, continuous from 0 to 5°/s

PATIENT TABLETOP	
<b>Dimensions</b>	246 x 80 cm (97 x 31")
<b>Radio-transparent area</b>	237 x 57 cm (93 x 22")
<b>Material</b>	Carbon fiber
<b>Patient tabletop type</b>	Flat or Concave (upon request)
<b>Patient tabletop movements type</b>	With longitudinal travel
<b>Minimum floor distance</b>	From 47.3 cm to 100 cm (18.6 to 39,4")
<b>Inherent filtration</b>	0.5 mm (0.019") Al/eq a 100 kVp
<b>Maximum patient's weight</b>	266 kg – 586 lbs (323 kg – 712 lbs with limitations)
<b>Vertical travel speed</b>	Step less from 0 to 45 mm (2")/s
<b>Transversal motorized travel</b>	±17,5 cm (7")
<b>Lateral travel speed</b>	Step less from 0 to 25 mm (1.18")/s

<b>Longitudinal travel</b>	±50 cm (20")
<b>Longitudinal travel speed</b>	45 mm (2.4")/s
<b>Maximum tabletop rear access distance</b>	52.5 cm (20.5") max

## X-RAY TUBE ASSEMBLY

<b>Longitudinal motorized travel (X-ray tube only)</b>	195 cm (77")
<b>Longitudinal motorized travel X-ray tube/ detector</b>	162 cm (64")
<b>Longitudinal speed X-ray tube assembly</b>	Motorized movement. Step less from 0 to 150 mm (6")/s
<b>X-ray beam assembly angulations</b>	± 40°
<b>Focus / detector distance</b>	From 115 to 180 cm (45 to 71") step less, motorized
<b>Focus/floor distance (Tilt +90°)</b>	From 40.5 to 226.5 cm (15.9 to 88.9")
<b>X-ray tube rotation movement</b>	90°/180° manual movement

## COMPRESSION CONE (OPTION)

<b>Compression device</b>	Motorized compressor cone with double safety system (mechanical and electrical)
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## TOMOGRAPHY

<b>Stratigraphy type</b>	Linear tomography in any tilting table angle
<b>Focus/film distance</b>	115 cm (45")
<b>Layer cut adjustment</b>	From 0 to 300 mm (0 to 12") to with millimetric adjustment
<b>Pre-programmed modes</b>	Automatic increment/decrement of the layer cut to be set by the operator before starting the tomographic technique

## AUTOMATIC COLLIMATOR WITH TOUCH SCREEN DISPLAY

<b>Collimator type</b>	Motorized with square field limitation device
<b>Lamp type simulation</b>	Led lamp 7 W
<b>Lighting average (IEC 601.1.3)</b>	> 200 lux a FFD = 100 cm (39")
<b>Fixed filter</b>	0.5 mm Al (0.019")
<b>Optional additional filters</b>	1 mm Al + 0.1 mm Cu / 1 mm Al + 0.2 mm Cu / 2 mm Al + 0.3 mm Cu

## DIGITAL IMAGE PROCESSOR

<b>Composition</b>	Processor unit for digital image processing Main Controller for X ray synchronization and measure of the X ray dose when the AEC is selected PU device, for detector connection and image acquisition
<b>Operating system</b>	Microsoft Windows 7
<b>Connection net</b>	
<b>Speed</b>	10/100/1000 Mbit/s (auto)
<b>Protocol</b>	TCP/IP
<b>IP address</b>	customizable in 4 bytes
<b>IP mask</b>	customizable in 4 bytes

## DETECTOR

	<b>Pixium RF4343</b>	<b>Pixium RF4343FL</b>
<b>Type</b>	Amorphous silicon	
<b>Technology</b>	Caesium Iodide	
<b>Matrix size</b>	2880 x 2880 pixel	
<b>Dynamic range - linear response</b>	16 bits	
<b>Pixel pitch</b>	148 µm	
<b>Acquisition area</b>	Nominal: 43 x 43 cm (17 X 17") Zoom 1: 30 x 30 cm (12 x 12") Zoom 2: 20 x 20 cm (8 x 8") Zoom 3: 15 x 15 cm (6 x 6")	

<b>Maximum acquisition rate</b>		
<b>Continuous fluoroscopy</b>	30 img/s	20 img/s
<b>Pulsed fluoroscopy</b>	15 img/s	12 img/s
<b>Spatial resolution</b>	3.4 lp/mm	
<b>DQE</b>	65% (@ 0 lp/mm)	
<b>MTF @ 1 lp/mm</b>	63%	55%
<b>MTF @ 2 lp/mm</b>	32%	25%
<b>Cover filtration</b>	< 0.3 mm (0.12") Al/eq a 100 kVp)	
<b>Grid features</b>	80 l/cm, 12:1 carbon fiber	
<b>Grid focalization</b>	From 115 to 180 cm (45 to 71") with "AUTOFOCUSING GRID" device	
<b>Grid removal</b>	Manual removal	

<b>Continuous digital fluoroscopy</b>			
<b>Size</b>	<b>Matrix</b>	<b>Frequency HIRIS RF4343</b>	<b>Frequency HIRIS RF4343FL</b>
43 x 43 cm (17 x 17")	960 x 960 x 16 bit	18 img/s	16 img/s
30 x 30 cm (12 x 12")	1024 x 1024 x 16 bit	15 img/s	12 img/s
20 x 20 cm (8 x 8")	672 x 672 x 16 bit	30 img/s	20 img/s
15 x 15 cm (6 x 6")	1024 x 1024 x 16 bit	15 img/s	6 img/s

Last Image Hold
Possibility to record a fluoro loop or LIH
Noise reduction with "motion sensitivity"
Multi step edge enhancement
Digital image inversion (Horizontal/Vertical)

## Pulsed digital fluoroscopy

Size	Matrix	Frequency HIRIS RF4343	Frequency HIRIS RF4343FL
43 x 43 cm (17 x 17")	960 x 960 x 16 bit	15 img/s max (1)	12 img/s max (1)
30 x 30 cm (12 x 12")	1024 x 1024 x 16 bit	15 img/s max (1)	12 img/s max (1)
20 x 20 cm (8 x 8")	672 x 672 x 16 bit	15 img/s max (1)	12 img/s max (1)
15 x 15 cm (6 x 6")	1024 x 1024 x 16 bit	15 img/s max (1)	6 img/s max (1)

(1) Adjustable from 1 img/s

Last Image Hold

Possibility to record a fluoro loop or LIH

Noise reduction with "motion sensitivity"

Multi step edge enhancement

Digital image inversion (Horizontal/Vertical)

## Digital radiography

Size	Matrix	Frequency HIRIS RF4343	Frequency HIRIS RF4343FL
43 x 43 cm (17 x 17")	2880 x 2880 x 16 bit	3 img/s max (1)	2 img/s max (1)
43 x 43 cm (17 x 17")	1440 x 1440 x 16 bit	8 img/s max (2)	6 img/s max (2)

(1) HR mode – high resolution

(2) HS mode – high speed

Direct hard disk image saving, Multi-step edge enhancement, H/V Digital image inversion

## Anatomical program

Library up to 99 parts of the body, each one with 99 projections performed with seven different patient types and for a total of 68.607 ways of using the system. The expositions parameters (kV, mA automatic exposure meter dominant) and the irradiated field can be changed by the operator during the examination.

<p><b>Automatic exposure</b></p>	<p>Completed with measure chamber at three dominant exposure meter which are selectable independently by the operator or during anatomical programming. Ability to link a predefined dose value between 0,5 uGy and 5,0 uGy (at the detector level) at each single anatomical program in function of the patient size (seven sizes). Generator automatic kV and mA set values. Exposures time fixed by the automatic exposure meter for constantly maintaining the operator pre-set dose and based on the exam type selection. Generator pulsed fluoroscopy dynamic kV value variation to optimize the image for each acquisition rate.</p>
<p><b>Exams documentations management</b></p>	<p>Each acquired image has indicated:</p> <ul style="list-style-type: none"> <li>- Patient name</li> <li>- Label number</li> <li>- Birth date</li> <li>- Date and time of the exam execution</li> <li>- Institute name</li> <li>- Radiographic parameters (kV, mAs),</li> <li>- Dose (mGy cm<sup>2</sup>)</li> </ul> <p>Display images parameters and reference scale. Archives querying and sorting by exam date or patient name. Possibility to define the default output (printers, writer/ burner CD/DVD, workstation or PACS). Multi-Store. Indication on monitor of the exam sent to PACS or printer. Management of network printers and film optimization with several reproduction modalities.</p>
<p><b>Real-time functions processing</b></p>	<p>Algorithms studied for each exam type to optimize image processing and display. High definition images display optimized within a short time. In acquisition sequence, real-time display preview format. After acquisition, automatic final format images availability. Application of post-processing algorithms without altering the source data.</p>
<p><b>Anatomic Tissue Harmonization (ATH) &amp; Fluoro Tissue Harmonization (FTH)</b></p>	<p>Radiographic (ATH) and fluoroscopic (FTH) software real time images processing to improve the acquired images with contrast increase, brightness and noise reduction. Increasing of the dynamic range for the acquired images. Adjustable anatomical program parameters and data customization during installation and in function of operator needs.</p>

<p><b>Post-processing functions</b></p>	<ul style="list-style-type: none"> <li>- Single image display or multi-image simultaneously displayed</li> <li>- Automatic contrast and brightness adjustment</li> <li>- Window Level and gamma adjustment</li> <li>- Zoom with variable enlargement 1:3</li> <li>- Grey Scale Inversion</li> <li>- H&amp;V image reverse</li> <li>- 90° image rotation and free rotation</li> <li>- SHARP (edges) and SMOOTH (faded edges) spatial filters, kernel size, and weight of the applied filter</li> <li>- Electronic shutters (square, and quadrilateral)</li> <li>- Virtual collimation (open/close the collimator controls on LIH to get the required result without X-ray emission)</li> <li>- Virtual scan (optional): this function allows patient centering without X-ray emission (this function uses the LIH in fluoroscopy or pulsed fluoroscopy that can be shifted on the monitor without X-rays emission).</li> <li>- Cine-loop of dynamic images sequence with different speed</li> <li>- Text and marker overlay</li> <li>- Graphic calculation of angles and distances (mm/pixel)</li> <li>- Grid overlay</li> <li>- COBB angle and orthopedic measurement (option)</li> <li>- Image export in RAW, JPEG and MP4</li> <li>- Reject analysis (flag the image currently shown as rejected and then specify the reason for its rejection)</li> </ul>
<p><b>Operator interface</b></p>	<p>Table joysticks control console. Digital system with multi touchscreen controls integrated:</p> <ul style="list-style-type: none"> <li>• generator and table management</li> <li>• images display</li> <li>• post-processing images management</li> <li>• images management</li> <li>• patient data management</li> <li>• Work list communication, RIS-PACS system printers, writer/burner CD/DVD</li> <li>• fluoro loop, possibility to record a loop after fluoroscopy</li> <li>• User Login Management (Max 50 Users)</li> <li>• 7 selectable Patient sizes</li> </ul> <p>The anatomical mode program can be checked by the operator through the image processor monitor and through the work list.</p>

<b>Connectivity</b>	<p>Ethernet TCP/IP network interface via DICOM protocol</p> <p><b>STANDARD DICOM</b></p> <p>DICOM Store          DICOM Send service          DICOM Print class          DICOM work list          DICOM MPPS</p> <p><b>OPTIONAL DICOM</b></p> <p>DICOM storage commitment          DICOM query/retrieve          DICOM DOSE SR          DICOM Media interchange (CD/DVD)</p>
<b>Supported Monitors</b>	<p>Control room monitor          Optional monitors connection</p>
<b>Optional special procedures</b>	<p><b>IMAGE RECONSTRUCTION (AUTO IMAGE PASTE)</b>          Automatic acquisition and re-composition of a set of radiography images (each time a different section of the patient is irradiated until a complete large format image is obtained). Typically for exams concerning the spine or legs.</p> <p><b>TOMOSYNTHESIS</b>          Digital image processing function producing multiple slices starting from a single image set acquired through tomography with limited rotation angles.</p> <p><b>ANGIOGRAPHY (DSA)</b></p> <ul style="list-style-type: none"> <li>• Mask shift</li> <li>• Image subtraction</li> <li>• Pixel shift</li> <li>• Vascular tracing</li> <li>• Land marking</li> <li>• QA analysis</li> </ul>

<b>MONITOR</b>	
<b>Monitor type and dimension</b>	23" color monitor
<b>Native resolution</b>	1920x1080
<b>Viewing angle</b>	178° H/V
<b>LCD Technology</b>	260 cd/m <sup>2</sup> (typical)
<b>Contrast</b>	1000:1 typ.
<b>Monitor weight</b>	6.6 Kg (14.5 lbs)
<b>Monitor dimension (mm)</b>	556.7 x 143.9-360.7 x 89-401.3 (22x5.7-14 x 3.5-15.8")

## GENERATOR

Type	65 R/F		80 R/F
Frequency	High frequency Output – (maximum 400 kHz)		
Power	65 kW		80 kW
Output parameters	G650		G800
	KV	mA	mA
	80	800	1000
	100	630	800
	150	400	500
Starter speed	Anode rotation 3000/9000 rpm		
Line voltage rate	±10%		

### Radiography

kVp Range/Steps	40 - 150 kV in 1 kV increments		
High voltage ripple	<1kV at 110 kV		
mA range/steps (*Rénard) (1 mA/0,1 mA optional steps)	10 – 800 mA * R'10	10 – 1000 mA * R'10	
Time range	1.0 to 6300 milliseconds		
mAs Range (no AEC)	0.1 – 1000 mAs/ R'10 *		

### Continuous Fluoroscopy

kVp Range/Steps	40 - 125 kV in 1 kV steps		
High voltage ripple	<1kV at 110 kV 5mA		
mA range/steps	0.5 – 10 mA in 0,1 mA steps		

### Pulsed Fluoroscopy

kVp Range/Steps	40-125 kV in 1 kV steps		
mA Range/steps	5-99 mA in 1 mA steps		

## RADIATION SOURCE ASSEMBLY - G292

<b>Anode type</b>	Rotating anode 3.000/10.000 rpm
<b>Anode material</b>	RTMC
<b>Anode diameter (mm)</b>	102 mm
<b>Anode angle</b>	12°
<b>Maximum tension</b>	150 kV
<b>Focal spots dimension</b>	0,6/1,2 mm
<b>Maximum power to 10.000 rpm</b>	40/100 kW
<b>Maximum power to 3.000 rpm</b>	30/60 kW
<b>Anode heath capacity</b>	445 kJ (600 kHU)
<b>Maximum Anode cooling rate</b>	125 kHU/min (1540 W)
<b>Housing heath capacity</b>	1480 kJ (2000 kHU)
<b>Maximum housing dissipation capacity</b>	445 Watts (600 HU/sec)

## OTS - OVERHEAD TUBE SUSPENSION (OPTION)

<b>Type</b>	Manual
<b>Rails</b>	<b>Longitudinal x Transversal</b>
Standard length	441 x 301 cm
Optional length	441 x 361 cm 361 x 301 cm
<b>Transversal Bridge</b>	
Transversal carriage rails travel	354 - 274 cm
<b>Ceiling Stand</b>	
Transversal carriage rails travel	217 - 277 cm
Elements number	5 extruded aluminum
Motorized vertical travel	170 cm
Type of movement	Manual
Balancing method	Motorized at "0 strength"
Adjustment of balancing strength	Automatic

<b>Radiation Source Assembly Support</b>	
X-ray tube rotation	+/- 160° around vertical axis +/- 155° around horizontal axis
Focus/X-ray source axis minimum distance	42,9 cm
Focus/ceiling minimum distance	95,5
Focus/floor minimum distance	33
Rotation movements brakes	Electro mechanics
<b>Ceiling Suspension Control Panel</b>	
Operator interface	Color display touch screen 10,4"
Brakes unblocks	"Capacitive" handle functions
Typical exam room height	295 cm
<b>Manual Collimator</b>	
Collimator type	manual collimator front panel with knobs
Rectangular field coverage	48x48 cm @1m
SID operative	90 ÷ 200 cm
Minimum collimation field	0 x 0 cm
Inherent filtration	2 mmAl/eq
Scattered radiation	<40 mR/h
Manual hardening filters	2 mm Al 1 mm Al + 0.1 mm Cu 1 mm Al + 0.2 mm Cu
Simulation light	Power LED
Lightening average	> 160 lux at FFD = 100 cm
Light field edge contrast ratio	> 4 @SID = 100 cm
X-ray field/light field accuracy	<1% SID
Scale /light field size accuracy	< 2% SID
SID indication accuracy	< 2% SID

<b>Radiation Source Assembly RTM 101</b>	
Type	Type RTM 101 / HS
X-ray tube assembly	Rotating anode 3.000/10.000 rpm
Anode material	Rhenium, Tungsten, Molybdenum
Anode diameter (mm)	102 mm
Anode angle	12,5°
X-Ray tube assembly maximum voltage	150 kV
Focal spots dimension	0,6/1,2 mm
Maximum power to 10.000 rpm	40/100 kW
Maximum power to 3.000 rpm	26/63 kW
Anode heath capacity	400 kHU - 300 kJ
Housing heath capacity	1.280 kJ
Anode dissipation capacity	125 kHU/min - 1000 W
Housing dissipation capacity	370 W (with fan)
Total minimum filtration (housing/X-ray tube/ collimator)	> 2,5 mm Al/eq
<b>INSTALLATION TECHNICAL DATA (OTS) SYSTEM POWER SUPPLY</b>	
Ceiling stand power supply (set during the installation)	115V-230V (± 10%) monophasic
Voltage power supply tolerance	± 10%
Nominal line frequency	50/60 Hz
Line tolerance	± 1 Hz
Standby power	300 VA
Peak power	2.000 VA
<b>Weights And Dimensions</b>	
Ceiling stand extendable elements weights with transversal bridge (including collimator and x-ray tube)	300 Kg*
Ceiling rails weights (longitudinal)	70 Kg*

## Thermal Dissipation

Kalos ceiling suspension	Approx. 1000 kcal/h
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\* heaviest configuration

## WALL BUCKY STAND (OPTION)

Model WS	Vertically adjustable
Model WST	Vertically adjustable with tilting device

Column structure with floor base and wall fixing.  
 Bucky for radiographic cassettes up to 35x43 cm (14 x 17") with counter-balanced vertical movement  
 Complete with grid (R12/L90/F180) and pre-set to receive an automatic exposure meter.  
 Mechanical locking on all movements.

	WS	WST
Bucky Vertical Travel	151.5 cm (59.65")	140 cm (55.12")
Min distance floor to bucky center vertical position / horizontal position	40 cm (15.75")	37.5 cm (14.76")/ 68.5 cm (26.97")
Max distance floor to bucky center vertical position	191.5 cm (75.39")	177.5 cm (69.88")
Tilting positions	No	Yes, 0°, +90° (with bucky rotation), -20°

## WIRELESS DETECTORS (OPTION)

### 35 X 43 Wi-Fi Pixium 3543Ez Detector

	GAD	CsI
Technology	Amorphous Silicon	
Scintillator	Gadolinium oxysulphide	Caesium Iodide
Pixel area	35 x 43 cm (14 x 17")	
Matrix size	2400 x 2880 pixel	
Pixel pitch	148 µm	
Data conversion	16 bit	
Spatial resolution	3,4 pl/mm	
DQE	37% typ.	66% typ.

Batteries charger	Yes, up to three batteries simultaneously (two batteries included)
Weight battery included	2.8 kg (6.2 lbs)

### 24 X 30 Wi-Fi Pixium 2430Ez Detector

Technology	Amorphous Silicon
Scintillator	Caesium Iodide
Pixel area	24 x 30 cm (9 x 12")
Matrix size	1560 x 1920 pixel
Pixel pitch	148 µm
Data conversion	16 bit
Spatial resolution	3.4 lp/mm
DQE	66% typ.
Batteries charger	Yes, up to two batteries included
Weight battery included	1.58 kg (2.2 lbs)

### INSTALLATION DATA

#### System Power Supply

System power supply	400 V AC, Triphase
Voltage power supply tolerance	± 10%
Nominal line frequency	50/60 Hz
Line frequency tolerance	± 2%
Maximum absorbed power (Gen. 65kW)	Apparent: 95 KVA; Active 65 KW
Maximum absorbed power (Gen. 80kW)	Apparent: 115 kVA; Active 80 kW
Line protection device	Magneto thermal differential 63A
Maximum power line resistance	0.1 ohm
Standby power	2 kVA

#### Weight And Dimension

Maximum table layout (w x h x d)	2,460 x 1,770 x 2,010 mm (97 x 70 x 79")
Table weight	1,380 kg (3,042 lbs)



Product may not be available in all countries and regions.  
Contact a GE Healthcare Representative for more information.  
Please visit [www.gehealthcare.com/promotional-locations](http://www.gehealthcare.com/promotional-locations).  
Data subject to change.

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