

# DR 600

## DIRECT RADIOGRAPHY SYSTEM

High-productivity, top-of-the-line, direct radiography system with motorized auto-positioning.

- Leading-edge automation and design in a multi-detector, high-productivity and high-throughput general radiography DR system
- Versatile motorized movement including horizontal and vertical tracking for exceptional ease of operation
- Excellent user friendly tube head display with preview image
- DICOM connectivity to PACS, HIS/RIS
- Excellent contrast detail provided by the next generation MUSICA image processing producing exam-independent consistent image quality
- Cesium Iodide DR detector technology giving significant patient dose reduction potential
- Can combine DR and CR, for high quality and flexibility strengths of each technology

The DR 600 unites excellent automation with Agfa's top-of-the-line image quality to create this high-productivity Direct Radiography (DR) solution. Ceiling-mounted, it comes with a detector in the wall stand and the table, and can be combined with a Computed Radiography (CR) digitizer to suit each customer's needs. This family of systems, with configurations ranging from a wallstand only to a fully motorized, auto-positioning solution, is ideal for facilities with a high patient load that are looking to streamline workflow and increase throughput. The DR 600 interfaces with the NX Workstation, for an integrated workflow that communicates seamlessly with PACS, HIS and RIS. Both APR and X-ray parameters, are downloaded onto the soft console in parallel with the tube head display when a patient is selected from the HIS/RIS via the NX Workstation,

The DR 600 features Cesium Iodide detector technology, which offers excellent image quality and immediate image availability. GOS (Gadolinium Oxy-Sulphide) detectors are also available. Agfa's unique latest generation MUSICA image processing delivers consistency and excellent contrast detail.

### Streamlined automation and innovative design

The DR 600 offers the latest in leading-edge automation technology. Productivity is at its highest, with the fully-automated tracking and collimators with DAP and LED lighting. Parameters like the innovative tube head design with touch screen control panel featuring a preview image, the integrated soft console on the NX monitor, grid sensing for both table and wall stand and solid state AEC for high-speed accuracy make this a premium X-ray room.





Excellent user-friendly 10 inch tube head display with preview image.

### Ultimate ease of operation, in any situation

The versatile ceiling suspended tube crane utilises a touch sensor keypad. This can control all the ceiling support movements, the display of the X-Ray parameters and patient details. The fully-motorized table and wall stand buckys have vertical or horizontal tracking with the tube which enables DR Full Leg Full Spine functionality as an option. The radiographic table also supports a heavy patient load.

### Configurations to meet every need

The DR 600 system offers a choice of CR and DR configurations, with a fixed detector in the wall stand and a cassette-sized detector in the table, or two cassette-sized detectors in the wall stand and the table, or a single detector that can be switched between the wall stand and the table. The fully-automatic system offers motorized vertical tracking on table and wall stand; horizontal tracking for the table, together with auto-positioning; and fixed or portable DR detectors in both the wall stand and the table.

### Next generation MUSICA: tuned for the best results

Agfa's 'gold standard' MUSICA image processing has been specially adapted and tuned to enhance the excellent DR image quality. Exam-independent, it provides consistent image quality and high contrast detail. And, with the same look-and-feel for MUSICA image processing, MUSICA workstation and DR 600, workflow is further improved in the integrated DR radiography room.

### Detector technology with dose reduction potential

The DR 600 offers the choice of GOS (Gadolinium Oxy-Sulphide) and Cesium Iodide technology, for high quality and high productivity. The excellent image quality of the Cesium Iodide offers the potential for significant patient dose reduction, while the immediate availability of images speeds up workflow and reduces patient waiting times.

### Combine CR flexibility and DR performance

The DR 600 can be integrated with Agfa's CR systems. Built on needle crystal detector technology, the combined systems deliver the high image quality and potential for dose reduction of DR, with the flexibility of cassette-based CR systems.



Floating table with double click footswitch.



Tilting wallstand bucky with vertical tracking, holders for patient convenience and collimator light switch.

## Technical Specifications

### PATIENT TABLE

- Tabletop width: 81 cm
- Tabletop length: 220 cm
- Table height (motorized adjustment): 55 to 90 cm
- X-Ray absorption: < 0.7 mm Al equivalent
- Tabletop travel longitudinal: 110 cm (+60 cm, -50 cm)
- Tabletop travel transverse: 24 cm. ( $\pm 12$  cm)
- Tabletop material: Resopal HPL (DIN EN438)
- Max. patient weight: 320kg
- Automatic exposure control: 3-field ion chamber

### CEILING MOUNTED X-RAY TUBE SUPPORT

- Ideal room height: between 2812 mm and 2965 mm
- Tube rotation range:  $0^\circ, \pm 90^\circ, \pm 12^\circ$  incl raster
- Tube rotation range:  $-180^\circ$   $+180^\circ$

### COLLIMATORS

- Inherent filtration: 2mm Al equivalent
- Full field light localizer: >160lx
- Additional filtration:
  - 1 mm Al + 0,1 mm Cu
  - 1 mm Al + 0,2 mm Cu
  - 2 mm Al
- Rotation:  $0^\circ, \pm 45^\circ, \pm 90^\circ$

### WALLSTAND

- Minimum room height: 250 cm
- Vertical Movement Range: 33,5 cm to 183 cm above floor (center position)
- Tilting bucky, angle of detector:  $-20^\circ$  to  $+90^\circ$  (horizontal position)
- Distance between front panel and detector: 50 mm
- Radiation absorption: < 0.7mm Al equivalent
- Automatic exposure control: 3-field ion chamber

### SYSTEM ACCESSORIES

- Table compression belt
- Table hand grips
- Table mattress
- Lateral cassette holder for table
- Lateral arm rest for wallstand
- Hand grips for wallstand

### CEILING SUSPENSION ACCESSORIES

- DR 600 Longitudinal rails 6 m
- DR 600 Longitudinal rails 5.5 m
- DR 600 Longitudinal rails 5 m
- DR 600 Longitudinal rails 4.5 m
- DR 600 Longitudinal rails 4 m
- DR 600 Longitudinal rails 3.5 m
- DR 600 Bridge 4 m
- DR 600 Bridge 3.5 m
- DR 600 Bridge 3 m
- DR 600 Bridge 2.5 m

### INSTALLATION DATA

- Line voltage Power Line 400V Y-source:
  - 400 V ~
  - 50/60 Hz
  - Three-Phase (3PH+N+PE)
  - Stand-by power max. 3.3A
- Power Line 400/480V  $\Delta$  source:
  - 400/480 V ~ (Selectable by service personal)
  - 50/60 Hz
  - Three-Phase (3PH+PE)
  - Stand-by power max. 3.3A

### Ambient conditions (operation)

- Temperature Range:  $+10^\circ$  C to  $+35^\circ$  C
- Humidity (non condensing): 30% to 75% relative humidity
- Atmospheric pressure:
  - Between 70 and 106 kPa
  - Maximum altitude 3000 m

### WEIGHTS

- Generator: 75 Kg
- Carriage: 240 Kg
- 2 Longitudinal rails (6m): 68 Kg
- Bridge or Transversal rails (4m): 43 Kg
- Table: 215 Kg
- Wall stand assembly: 157 Kg
- Tilting wall stand assembly: 196 Kg
- Bucky in Table: 26.5 Kg
- Bucky in wall stand: 26 Kg
- Collimator: 11 Kg

## GENERATORS

Generator model	EDITOR HFe 501	EDITOR HFe 601	EDITOR HFe 801
Max. Power	50 kW	65 kW	80 kW
Power Output (at 0.1s)	625mA: 80kVp 500mA: 100kVp 400mA: 125kVp 330mA: 150kVp	800mA: 80kVp 650mA: 100kVp 520mA: 125kVp 430mA: 150kVp	800mA: 80kVp 800mA: 100kVp 640mA: 125kVp 530mA: 150kVp
kV-Range for exposure in increments of or in kV Accuracy	40-150 kV	40-150 kV  1 kV 27 steps $\pm(5\%+1kV)$	40-150 kV
mAs-Range	0.5-600 mAs 32 steps	0.5-600 mAs 32 steps	0.5-600 mAs 32 steps
Power Line 400V Y-source	400 V ~ 50/60 Hz Three-Phase (3PH+N+PE) Stand-by power max. 3.3A		
Power Line 400/480V $\Delta$ source	400/480 V ~ 50/60 Hz Three-Phase (3PH+PE) Stand-by power max. 3.3A		
Dimensions (W x D x H)	90 cm x 43 cm x 31 cm		

## X-RAY TUBE

Type	E7884X	E7252X	E7254FX	E7869XX
Speed	LS	HS	HS	HS
Nominal X-ray Tube Voltage (IEC60613:2010) Radiographic	150 kV	150 kV	150 kV	150 kV
Nominal Focal Spot Value large/small Focus	1.2/0.6	1.2/0.6	1.2/0.6	1.2/0.6
Length	479 mm	476 mm	463 mm	496 mm
Maximum Diameter	152.4 mm	152.4 mm	172 mm	195 mm
Target Anode Angle	12 degrees	12 degrees	12 degrees	12 degrees
Diameter	74 mm	74 mm	100 mm	100 mm
Construction	Rhenium-Tungsten- faced Molybdenum	Rhenium-Tungsten- faced Molybdenum	Rhenium-Tungsten- faced Molybdenum	Rhenium-Tungsten- faced Molybdenum
Weight (Approx.)	16 kg	18 kg	20 kg	24 kg
Anode Heat Content	210 kJ (300kHU)	210 kJ (300 kHU)	285 kJ (400 kHU)	420 kJ (600 kHU)

DR 600

For more information on Agfa, please visit our website on [www.agfa.com](http://www.agfa.com) ■

Agfa and the Agfa rhombus are trademarks of Agfa-Gevaert NV, Belgium, or its affiliates. MUSICA is a trademark of Agfa-Gevaert NV, Belgium, or its affiliates. All rights reserved. All information contained herein is intended for guidance purposes only, and characteristics of the products and services described in this publication can be changed at any time without notice. Products and services may not be available for your local area. Please contact your local sales representative for availability information. Agfa-Gevaert NV diligently strives to provide as accurate information as possible, but shall not be responsible for any typographical error.

© 2018 Agfa NV  
All rights reserved  
Published by Agfa NV  
Septestraat 27 - 2640 Mortsel  
Belgium

5500Q GB 00201801

**AGFA** 