

DX-D 300

FLEXIBLE DIRECT RADIOGRAPHY SYSTEM

The DX-D 300 DR system unites excellent image quality with the ultimate convenience. It offers top-of-the-line technology: a fully-motorized positioner enabling most exams with a single detector. Optional integration with Agfa Computed Radiography maximizes versatility. Its universal application, flexibility and affordability makes the DX-D 300 the DR system of choice for multipurpose rooms.



The DX-D 300 provides a cost-effective and easy to implement solution to get all the quality and productivity benefits of Direct Digital image capture. High quality Cesium Iodide detector technology offers excellent image quality with rapid image availability, while the proprietary MUSICA image processing delivers consistency and superior contrast detail.

The fully-motorized DX-D 300 eliminates the need for manual tube positioning and automatically maintains tube detector alignment for ease of use. This adaptability makes it ideal for use with all patients, even those less mobile, whether in sitting, standing or lying positions. By facilitating positioning, reducing patient waiting times and increasing diagnostic confidence, the DX-D 300 answers your need for constant enhancement of patient comfort and performance of your radiology department.

- MUSICA processing provides outstanding contrast detail and consistently excellent image quality
- Universal, flexible and affordable modality combines a single detector and a fully-motorized positioner
- Includes NX acquisition station with comprehensive functionality
- DICOM connectivity to PACS, HIS/RIS and imagers
- Floor mounting and compact size for an ideal fit
- Affordable and convenient Direct Digital image capture
- Expanded versatility with optional CR/DR combination

DX-D 300 DR SYSTEM



The smart design of the DX-D 300 allows fast installation and an easy fit into most diagnostic imaging environments. The floor mounting and compact size minimize installation costs. Combined with the popular NX workstation and MUSICA image processing, the DX-D 300 provides outstanding images and efficient workflow.

Superior contrast detail provided by MUSICA

The 'gold standard' MUSICA image processing in the DX-D 300 has been specially adapted and tuned to provide excellent DR image quality. Exam-independent, MUSICA delivers consistent image quality and high contrast detail with minimal manual intervention.

Cesium Iodide technology for dose reduction potential

The DX-D 300 offers Cesium Iodide technology, for a high quality, high productivity solution. The fast image preview streamlines workflow and reduces patient waiting times.

Universal, flexible and affordable

Offering maximum flexibility, the DX-D 300 has been ergonomically designed to perform a wide range of X-ray exams including upright, table, and angled exams. Its fully motorized U-arm and detector make lateral exams easy. This versatile solution handles a wide range of diverse studies including ambulatory patients or those in wheelchairs, emergency, chest, extremities, abdominal studies and more. When combined with a CR and Easylift system, a single exposure Full Leg-Full Spine exam provides outstanding geometric measurement accuracy while minimizing motion artefacts.

This adaptability makes the DX-D 300 ideal for most applications, from general radiography in any hospital, clinic or private practice; to emergency work in smaller facilities; to specialized fields such as orthopedic clinics or practices.

Single detector and fully-motorized positioner

With patient comfort on everybody's mind, the DX-D 300 X-ray system's fully-motorized design and U-arm positioner make positioning quick and easy even for difficult exams.

The motorized arm rotation, arm height, source-image distance and the $+ 45^\circ / - 45^\circ$ detector rotation are all operated by two-speed motors that can be activated via infra-red remote control or using the buttons on the tube head and bucky. Configurable preprogrammed positions facilitate quick positioning for patient comfort. Sensors are incorporated in all movements to protect patient safety.

An ideal fit

The DX-D 300 has been designed to be ergonomic and user-friendly. Although compact in size - just 9.84 x 9.84 x 9.18 ft (3m x 3m x 2.8m) - this powerful system provides a variable source to image distance (SID) of 40" to 72" to accommodate a wide range of radiographic studies.

Integration: connectivity for a more efficient workflow

The DX-D 300 and NX workstation combine to create, a practical workflow, that is easy to learn and convenient to use. The NX has full RIS connectivity for automatic patient data entry for each exam. The fast preview helps to quickly QC positioning and the image is automatically processed with the MUSICA image processing software in just seconds for enhanced contrast detail. Studies can then be passed on to the PACS or imager for diagnostic

viewing. Reject analysis and annotations are just part of the comprehensive functionality provided by NX, which comes standard with each system.

A quick and easy way to go Direct Digital!

With the DX-D 300, healthcare facilities of any size can enjoy the productivity benefits of Direct Digital, at an affordable price. The rapid image acquisition increases the number of exams per X-ray unit compared with conventional rooms, and permits a faster release of patients. Flexible positioning capability and faster image presentation mean improved patient comfort, and operator productivity

Uniting CR and DR for top versatility

For top versatility, the DX-D 300 can be further enhanced by combining it with Agfa HealthCare's CR digitizers- This unites the DX-D 300's excellent image quality and DR productivity with CR versatility. The result is a mixed CR/DR radiology environment that suits each customer's unique needs. With the DirectriX needle detectors designed for the DX-S and DX-G, Agfa HealthCare uniquely offers high image quality with both the DR detector and the CR digitizer, at the same NX workstation with the same look and feel.



Technical Specifications

The DX-D 300 standard configuration contains:

- U-arm positioner with control unit
- On-tube touch-screen
- 64 kW generator
- Single detector (Csl)
- Automatic collimator with integrated DAP meter
- AEC (Automatic Exposure Control)
- 2 focused grids
- Remote control
- NX workstation with comprehensive functionality
- Touch-screen X-ray control console
- Uninterruptable power supply

UNIVERSAL X-RAY UNIT

Positioner

- **Maximum height (of positioner):** 109.25 in (2775 mm)
- **Maximum length:** 84 in (2135 mm)
- **Maximum width:** 66 in (1680 mm)
- **Weight:** 714.3 lb (324 kg)
- **Vertical travel of central carriage:** 49.8 in (1265 mm)
- **Minimum source-image distance (SID):** 40 in (1000 mm)
- **Maximum source-image distance (SID):** 70.8 in (1800 mm)
- **SID adjustment speed:** 3.4 in/s (87 mm/s)
- **Rotation of U-Arm:** +120°/-30°
- **Rotation of Tube-Collimator Assembly:** ±180°
- **Rotation of DR Detector :** ±45°
- **Grids:** Interchangeable grids
- **Ratio 8:1, Focus:** 1 m - 50 lines/cm
- **Ratio 8:1, Focus:** 1.80m - 50 lines/cm

Rolling radiographic table (optional)

- **Radiographic moving table** with brakes in two wheels
- **Carbon fibre table top**
- **Patient capacity of 441 lb (200 Kg)**
- **Length X Width X Height:** 78.7 X 25.6 X 27.6 in (65 cm X 70 cm X 30 cm)

Power line requirements

- **Single phase:** 50 / 60 Hz, 230 / 240 V \pm 10 %
- **Minimum input power required:** 2.5 kVA
- **Power Consumption in stand-by:** 80 W
- **Room size requirements:** 118 x 118 x 110 in (Length x Width x Height) (300 x 300 x 280 cm)

Operating environmental conditions

- **Working temperature:** 59° F to 95° F (5° C to 35° C)
- **RH (relative humidity):** 30 % to 75 %
- **Air pressure:** 700 hPa to 1060 hPa

Storage / transport environmental conditions

- **Temperature range:** -4° F to 158° F (-20° C to 70° C)
- **Relative humidity range:** 10 % to 90 %
- **Atmospheric pressure range:** 500 hPa to 1060 hPa

Control box

- **Height x Width x Length:** 23.6 x 23.3 x 16.6 in (600 x 592 x 422 mm)
- **Weight:** 86 lb (39 kg)

COLLIMATOR

- Automatic
- Integrated Dose Area Product meter
- High luminosity of collimation field

X-RAY TUBE TOSHIBA MODEL E7254FX

- Maximum Voltage: 150 kVp

Focus sizes

- Small focus: 0.02 in (0.6 mm)
- Large focus: 0.05 in (1.2 mm)

Maximum power

- Small focus: 40 KW
- Large focus: 102 KW

Maximum Current

- Small focus: 500 mA
- Large focus: 1000 mA
- Anode degree target angle: 12°
- Anode heat capacity: 400.000 H.U.
- Anode rotation: 3.000/9.700 r.p.m.
- Anode diameter: 3.93 in (100 mm)
- Filtration equivalent: 0.11 in (2.8 mm) Al

64KW GENERATOR FEATURES

- High Frequency: 25 KHz
- Power requirements: three phase 380/480 VAC Phase rating: 20 A)
- Optional 50 kW/230V single phase

Output power

- 640 mA @ 100 KVp
- 500 mA @ 125 KVp
- 400 mA @ 150 KVp
- RS232 Interface to be controlled from the Acquisition Station

- X-ray tube overload protection
- X-ray tube H.U. available indication and continuously monitoring for X-ray tube protection

KVp radiographic range:

- From 40 to 150 KVp in 1 kVp step

mA radiographic range:

- From 10 to 640 mA in 19 step, Renard scale
10, 12.5, 16, 20, 25, 32, 40, 50, 64, 80, 100, 125, 160, 200, 250, 320, 400, 500, 640 mA

mAs range:

- From 0.1 to 500 mAs in 38 step, Renard scale

Exposure time range:

- From 0.001 to 10 seconds

DETECTOR

- Image size: 16.9 x 16.9 in (43 x 43 cm)
- Resolution: 139 micron pixels
- Scintillator: Cesium Iodide
- DQE(0) : ~65 % (RQA5 conditions)
- Photodiode Array
Contiguous Amorphous Silicon matrix
- Fast Preview:
time to start preview: < 1 sec after exposure

DX-D 300 SOLUTION OPTIONS

- CR digitizer
- FLFS CR Easylift
- NX Platinum for DR
- Hardcopy imager
- Rolling Patient Table
- Wireless detector for free exposures

DX-D 300 DR SYSTEM

Agfa and the Agfa rhombus are trademarks of Agfa-Gevaert N.V., Belgium, or its affiliates. Directrix and MUSICA are trademarks of Agfa HealthCare N.V., Belgium, or its affiliates. All other trademarks are held by their respective owners and are used in an editorial fashion with no intention of infringement. The data in this publication are for illustration purposes only and do not necessarily represent standards or specifications, which must be met by Agfa HealthCare. 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 at agfa.com for availability information. Agfa HealthCare diligently strives to provide as accurate information as possible, but shall not be responsible for any typographical error.

© 2015 Agfa HealthCare Corp.
All rights reserved
Published by
Agfa HealthCare Corp.
10 South Academy Street
Greenville, SC 29601 USA
5N29E US 00201504

AGFA 
HealthCare