PHILIPS

DuraDiagnost

Radiography solutions

High workflow efficiency **like no other**

Philips DuraDiagnost digital radiography system – Efficiency room HP

Key advantages

- Reliable performance with high system uptime
- Diagnostic confidence with quality patient care
- High patient throughput enabled by workflow efficiency

If growing X-ray examination volumes are stretching your resources to the breaking point, DuraDiagnost Efficiency room High Performance (HP) may be a cost effective solution.

This versatile DR room comes fully configured to give a boost to your throughput. With two detectors (one fixed, one wireless) and a height adjustable table, the DuraDiagnost Efficiency room HP helps provide good diagnostic image quality across a full range of exam applications.

Designed for fast positioning and speedy workflow, the system is a sensible, affordable choice. It provides Philips quality, service, and reliability to your facility, and may enhance comfort to your patients.

Manage your busy exam schedule with ease

Extend your clinical capabilities

Selecting a DR system to handle chest, abdominal, extremity, and free exposures without breaking the bank is critical in today's competitive healthcare marketplace. Yet the need to extend your clinical capabilities and remain financially responsible can be a challenge.

Stepping up to meet that challenge is the DuraDiagnost Efficiency room HP. This system comes fully outfitted with two detectors (one fixed and one portable wireless SkyPlate), a vertical stand, an X-ray tube floor stand, and a height adjustable table. Each element contributes to the system's ability to be extremely versatile across all applications.

The two-detector benefit

Key to the versatility of the DuraDiagnost Efficiency room HP is the dual detector setup. A fixed detector is in the vertical stand, while the SkyPlate wireless portable detector is used in the height adjustable table, or separately for challenging free exposures.

Benefits:

- Less time and effort is required for exam setup
- A broad range of clinical examinations
- Provide fast workflow

You get exceptional performance – the robust fixed detector delivers a large detection area of 17" x 17" for all general radiology applications.

Our unique SkyPlate wireless technology provides excellent diagnostic images. The single, lightweight (2.8 kg including battery) cassette-sized portable detector (14" x 17") gives you untethered access to a wide variety of patient positions. With its rugged, reliable construction, SkyPlate can withstand shocks and vibrations and is stable at a wide range of temperatures and humidity. Across diverse environmental conditions, it is built to provide long-lasting performance year after year.

Efficient workflow features

All features of the DuraDiagnost Efficiency room HP have been designed to provide a comfortable examination experience for both technician and patient. That includes the height adjustable table.

The table can be quickly raised or lowered to assist with patient type – pediatric, bariatric, ambulatory, or wheelchair bound. By helping to smooth the exam process, you can focus more closely on patient care. Combine the table with the SkyPlate detector and workflow enhancements become obvious.

A variety of innovations assist with the speed, quality, and consistency of your overall examination efforts.

- **Default SID positions** are designed to facilitate fast positioning and can be adjusted to support all general radiography examinations
- **Comfort Align** facilitates laser assisted alignment between X-ray tube and detectors
- **SmartOne button** intuitive interface allows you to easily execute geometry movements with just one finger

Eleva User Interface

To further simplify the DR imaging process, the DuraDiagnost Efficiency room HP is managed by our Eleva user interface, which provides all the tools and controls necessary for seamless procedures.

The Eleva concept is a common interface platform at work across virtually all of our radiography and fluoroscopy systems. It promotes a superb work environment and workflow continuity so that you can achieve fast, consistent, reproducible image quality time after time. It is easy to learn and use, thus to streamline your radiography department.

It takes just three easy steps to get an image after exposure. Parameters for every type of examination, view, and acquisition are extensively enhanced for virtually every type of patient, from babies to obese adults. You can easily choose from our pre-programed settings and apply them right from the Eleva workspot for image processing, printing, and export to PACS.

With the Philips Eleva user interface you get high uptime and low operational costs.

Generator

Generator	50 kW	65 kW	80 kW
High-voltage generator	The converter generator generates high voltage equivalent to DC voltage		
Mains voltage	400 V / 480 V (±10%); 50 Hz or 60 Hz, 3-phase		
Max. mains resistance at 400 V	0.3 Ohm	0.2 Ohm	0.2 Ohm
Max. mains current at 400 V	112 A	134 A	160 A
Nominal power (IEC)	50 kW	65 kW	80 kW
Max. tube voltage	150 kV	150 kV	150 kV
Max. tube current (at 70 kV)	630 mA	928 mA	1000 mA
Max. tube current (at 100 kV)	500 mA	650 mA	800 mA
X-ray tube	RO1750	SRO33100	SRO33100
mAs product (with AEC control)	0.4 mAs to 850 mAs	0.4 mAs to 850 mAs	0.4 mAs to 850 mAs
Exposure times	1 ms to 4 s		
Safety	Tube overload protection		
	Automatic mains voltage compensation		

X-ray tubes

Tube	RO 1750	SRO 33100
Focal spot	0.6 / 1.2	0.6 / 1.2
Ratings	17 kW / 50 kW	33 kW / 100 kW
Anode angle	13°	13°
Anode heat storage capacity	220 kJ (300 kHU)	220 kJ (300 kHU)
Maximum voltage	150 kV	150 kV
Tube overload protection	√	√

Eleva Workspot

Hard disk	• 500 Gb total • 203 Gb for the image data (equivalent to approximately 11548 images)
RAM storage capacity	4 Gb
Interfaces	• Ethernet 10/100/1000 Base-T Gigabit • DICOM interface • Detector interface • Memory stick support for QC
CD writer	DVD/CD writer
Monitor	• 19" LCD color touch screen monitor
Keyboard with mouse and function buttons	For entering administrative patient data and for operating the screen menus
Image data	
Data volume	Up to 18 Mb/image
Matrix depth	15 bit/pixel
Power supply	
Mains voltage	115 V / 230 V (+10%, –15%)
Mains frequency 5	0 Hz / 60 Hz
Current input	max. 4 A
Fuse	10 A

Main components

Hardware
- One fixed and one wireless portable detector
- Floor-mounted height adjustable table
- Vertical stand
Tube column with X-ray tube assembly
Generator and X-ray tube pack (50 kW and RO1750)
Eleva workspot with 19" LCD touch screen
Software
Eleva application and examination database software
Integrated generator control
UNIQUE image processing

SkyPlate wireless portable detector

Type	Digital CsI (Cesium Iodide) flat detector (ISO 4090)	
Housing material	Carbon fiber	
Sensor protection material	Carbon fiber	
Detector sizes	35 cm x 43 cm (14" x 17")	
Active area	34.48 cm x 42.12 cm (13.6"x 16.6")approx.	
Dimensions according to ISO 4090	383.5 mm x 459.5 mm x 15 mm (approx. 15.1" x 18.1" x 0.6")	
Image matrix size	2330 x 2846 pixel	
Detector pixels	6.6 Megapixels	
Pixel size	148µm	
Image resolution	up to 3.38 Lp/mm	
DQE and MTF values at 2 µGy	DQE (%)	MTF(%)
0.05 Lp/mm	66	98.5
1.0 Lp/mm	50	61
2.0 Lp/mm	40	30
3.0 Lp/mm	24	15
Energy range (kVp)	40-150	
A/D conversion (bits)	16	
Weight (incl. battery)	2.8 kg (6.2 lbs) Exept: North America & China: 3.0 kg (6.6 lbs)	
Maximum patient weight	100 kg (220 lbs) on 4 cm disk for weight bearing examiniations 135 kg (298 lbs) for distributed load, e.g. chest examinations in bed	
WLAN network standard	WiFi standard IEEE 802.11 a.b.g or n (configurable)	
Encryption	Default WPA2 encryption according to IEE 802.11i	

Fixed detector

Scintillator	Gd^2O^2S	
Detector size	43 cm X 43 cm (17" x 17")	
Image matrix size	2874 x 2869 pixel	
Pixel size	148 µm	
A/D conversion	16 bits	
Active area	42 cm X 42 cm	
Detector pixels	8.2 Megapixel	
Image resolution	Up to 3.4Lp/mm	
QE and MTF values at 1 µGy	DQE (%)	MTF (%)
0.05 Lp/mm	37	98.5
1.0 Lp/mm	25	54
2.0 Lp/mm	13	20
3.0 Lp/mm	4	7

Collimator

Type	Manual, with light field indicator
Angle of aperture and rotation	±45°
Timer switch	30 s
Inherent filter value	<0.3 mm Al at 100 kV, depending on the collimator
Added filters	2 mm Al or
	1 mm Al + 0.1 mm Cu or
	1 mm Al + 0.2 mm Cu or
	None

Proven digital imaging chain

The DuraDiagnost Efficiency room HP shares the same tube and generator configuration that is found on Philips premium DR systems. These well proven digital imaging components deliver high-quality, distortion-free images.

The powerful X-ray tube is designed for extended, uninterrupted performance and low lifecycle costs. The flexible generator is available in two versions – 50kW or an optional 65kW or 80kW. The generator controls are integrated into the Eleva interface for streamlined operation.

Many features are automated. Anatomical Programmed Radiography (APR) settings make it possible to X-ray patients according to the clinical applications. And automatic exposure control (AEC) is set according to exposure voltage and object characterization.

This proven Philips DR imaging chain enhances quality and confidence.

UNIQUE image processing

Enhanced image helps to facilitate diagnostic confidence. UNIQUE automates the contrast process and quickly provides the kind of harmony and high quality detail normally achieved through manual adjustments. The image display can be customized to meet your individual preferences.

UNIQUE image processing delivers consistently good clinical image quality for all anatomical areas.

Highly capable

The DuraDiagnost Efficiency room HP supports a full range of exam applications so you can help more people. DuraDiagnost has a flexible configuration, is efficient and allows for excellent patient care, and as a result, your return on investment is enhanced.

© 2015 Koninklijke Philips N.V. All rights reserved.
Specifications are subject to change without notice.
Trademarks are the property of Koninklijke Philips N.V. (Royal Philips) or their respective owners.

4522 991 13531 * NOV 2015

www.philips.com
healthcare@philips.com