



PHILIPS

DuraDiagnost

Radiography solutions

High clinical flexibility like no other

Philips DuraDiagnost digital radiography system – Value room HAT

Key advantages

- Ease of use by intuitive/ergonomic design of handling
- Reliable performance with high system uptime
- Diagnostic confidence with quality patient care and flexibility

The need to expand imaging services to help more people, while reducing costs is a challenge for today's healthcare providers.

Positioned as a practical way to enter the digital world, the Philips DuraDiagnost Value room HAT offers comprehensive DR coverage at a low cost of ownership. Key to the system's versatility is the SkyPlate wireless portable detector, which speeds exams and delivers excellent diagnostic image quality.

Your patients benefit from fast, smooth examinations and your facility benefits from a reputation for Philips quality.

Robust DR system supports all exam types

Performance that is easy to own

What better way to move from analog to digital X-ray than with a system capable of accommodating a wide variety of chest, abdominal, and extremity examinations, which may enhance your return on investment. The DuraDiagnost Value room HAT does just that.

This system's unique configuration combines the versatility of the Philips SkyPlate wireless portable detector with workflow highlights such as a height adjustable table (HAT) and intuitive Eleva user interface.

The wireless advantage

To handle a growing volume, you must keep patients moving quickly through the exam room and acquire images of consistently good quality. Our unique SkyPlate technology helps provide excellent diagnostic results. The single, lightweight (2.8 kg), 14" x 17" cassette sized wireless portable detector gives you untethered access to a wide variety of patient positions.

Simple to use and easy to handle, SkyPlate can be positioned in the table, vertical stand, or used free of both for challenging 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 Value room HAT have been designed to provide a comfortable examination experience for both technician and patient.

The height adjustable table (HAT) 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 more closely focus on patient care.

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 Value room HAT 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-programmed settings and apply them right from the Eleva workspot for image processing, printing, and export to PACS.

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

Proven digital imaging chain

The DuraDiagnost Value room HAT shares the same tube and generator configuration that is found on Philips premium DR systems. The well proven digital imaging components deliver high quality, virtually 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 provides confidence.



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 ($\pm 10\%$); 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 kWh)	220 kJ (300 kWh)
Maximum voltage	150 kV	150 kV
Tube overload protection	√	√

Eleva Workspot

Hard disk	<ul style="list-style-type: none"> • 500 Gb total • 203 Gb for the image data (equivalent to approximately 11548 images)
RAM storage capacity	4 Gb
Interfaces	<ul style="list-style-type: none"> • 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	50 Hz / 60 Hz
Current input	max. 4 A
Fuse	10 A

Main components

Hardware:

Floor-mounted height adjustable table and vertical stand with one wireless

portable detector (Value room HAT)

Tube column with X-ray tube assembly

Generator and X-ray tube pack (50kW and RO1750)

Eleva workspot with 19" LCD touchscreen

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 examinations 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	

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



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.

The right system at the right price

The DuraDiagnost Value room HAT is a DR system that takes advantage of advanced technologies. Although simple in configuration, it is powerful in operation. Ease of ownership and exam versatility makes the system a sensible choice for clinics and hospitals worldwide.

When you are tasked with helping more people in a busy imaging environment, this DR solution is the answer.