



**PHILIPS**

MobileDiagnost 2.2

Digital radiography

# Access all areas with the premium DR room to go

## Philips MobileDiagnost 2.2

Enjoy outstanding workflow benefits with rapid availability of premium digital images. Philips MobileDiagnost wDR offers you the same exceptional quality and efficiency of a Philips premium DR room in a flexible mobile X-ray system.

MobileDiagnost wDR is the mobile technology you need for imaging on the go.

- Make use of a flexible system with collapsible column, one-step positioning, gridless imaging for all anatomy, and up to 200 exposures per battery charge to speed you through your daily exams.
- Experience ease of mind with this highly secure mobile X-ray system featuring Windows 10 operating platform, Hard Drive Encryption, Keyless Entry, and Isolated plug and play ports.

- Get excellent images with visualization of subtle details within seconds to facilitate fast and confident diagnoses.
- MobileDiagnost wDR's rugged design and reliable quality are supported by world-class customer service and flexible options to protect your investment.

### Key benefits

- State-of-the-art efficiency technologies
- Latest in Network Security
- Next generation Image Processing to facilitate diagnostic confidence



## MobileDiagnost wDR puts you in control to reach new levels of imaging flexibility

Workflow excellence allows technologists to move through their day with speed and confidence. Intuitive features provide rapid availability in critical situations.

Digital wireless mobility means having a DR room wherever you need it. That's especially beneficial for acute areas where quick decisions are essential. Take the equipment to the patient – because fast diagnoses can make all the difference.

“In the past we used a grid for every chest image. Now we make these images without a grid. Without a grid, the detector is much lighter which makes positioning at the patient’s bedside a lot easier.”

Ciska Louwerse  
X-ray technologist at  
Sint Lucas Andres Hospital  
Amsterdam



#### **Ease of mobility**

The MobileDiagnost wDR, with its motorized drive, compact wheelbase, and comfortable driving speed, transports easily to every area of the hospital. The sliding column, based on non-motorized counter-balancing technology, collapses down and out of the way for excellent visibility while on the go.

With a small turning radius and cable-free design, the system fits well into busy acute areas of your hospital such as OR, ICU, NICU and Emergency Departments.

#### **Effortless positioning**

This versatile system slips effortlessly into place. The flexible telescopic tube, with an extension range of 49 inches and 317 degrees of rotation, reaches easily over patient beds. Handles on the collimator box let you move the tube head and collimator into position in one easy step. Fine positioning control on the tube head offers precise final adjustments.

If you are in an extremely tight space and don't have room to maneuver the tube head away from the system, you can take an exposure with the tube head in the "park position". Zero degree exposure capability means even the tightest spaces are now manageable.



### Fast, easy gridless workflow

When you choose not to work with a grid, SkyFlow Plus scatter correction technology allows you to acquire views of all anatomies without the use of a grid, resulting in quick, convenient exams.

With SkyFlow Plus there's really nothing to adjust. Simply select your patient type and the intelligent software algorithm automatically adjusts contrast enhancement based on the amount of scatter. There's no need for manual manipulation of parameters such as mAs, SID, or kV.

By eliminating the grid, you eliminate retakes caused by grid misalignment and you save valuable time. In tests, gridless workflow with SkyFlow Plus resulted in an average time savings of 34 seconds and up to 50 seconds compared to exams conducted with a grid.

If you do decide to use a grid, SkyFlow Plus automatically shuts off. No grid, and it turns itself back on. It's also pediatric friendly. For all imaging below 60 kV, it automatically shuts off.



Abdomen taken with SkyFlow



Abdomen without SkyFlow

### State of the art detectors

Easy-to-position, lightweight, cable-free SkyPlate cesium iodide detectors provide exam freedom. Place them where you need them, even in the most difficult projections. The large SkyPlate comes in handy for free exams and in OR tables, whereas the smaller sized SkyPlate is tailor-made for common incubators in the NICU as well as adult shoulder, skull, and extremity views. SkyPlates are stored directly in the unit so they are always within reach.

### More power for more imaging

On those long days with dozens of patients, you rely on immediate power-up. MobileDiagnost wDR employs an advanced lead crystal battery design for exceptional power efficiency and long life. One full charge delivers up to 200 consecutive exposures. You can even take exposures with the system plugged in to increase system uptime.

## With MobileDiagnost wDR everyone benefits



#### • Administrators:

Your hospital advances to another level of efficiency with Performance or High Performance versions that cater to individual department needs

#### • Radiologists:

Radiologists get rapid access to premium quality digital images, to facilitate fast diagnoses and response time to their patients

#### • Technologists:

Technologists experience seamless procedures via lightweight SkyPlates, the premium Eleva interface, and motorized mobility

#### • Patients:

Patients receive prompt point-of-care exams thanks to a mobile DR system that offers rapid, high quality images



“Having Philips Mobile DR at bedside is particularly impactful to situations such as a Code or Trauma patient by having the images available in real time on the unit.”

Augusta Health

## MobileDiagnost wDR delivers image quality with functions for workflow efficiency

Speed must be balanced with image quality. MobileDiagnost wDR is outfitted with the latest user-friendly, automated features to keep pace, while acquiring excellent images.

Choose between two versions – the MobileDiagnost wDR Performance (20 kw generator) for all standard X-ray exams and the MobileDiagnost wDR High Performance (40 kw generator), which expands your range to bariatric and spine trauma patients.



### Next generation image processing

UNIQUE 2 image processing technology minimizes the compromise between sharpness and noise, increasing detail visualization, down to 1 mm if desired, to support diagnostic confidence. It brings detail to very dark and very bright image regions by accurately balancing contrast levels and offering extended flexibility to adjust contrast. It delivers a more homogenous and consistent image impression, regardless of patient type or anatomy, with an all-black background.

Designed for flat detector use and efficient workflow, images can be viewed within seconds after the exposure, fully processed.

### Target and Deviation indexing

To further enhance your diagnostic confidence, the Target Exposure and Deviation Index Range are displayed automatically during image review, enabling good exposure and acceptable IQ on every image. In addition, red, yellow and green indicator lights will visually display where the actual dose of the image was in relation to the target. This feature results in real-time dose feedback and can be used as a quality management tool.

### Intuitive user interface

The premium Eleva user interface unites all tools and controls via intuitive touch-screen functions. Seven patient types setup allows critical exam parameters to be selected according to patient size, resulting in superb image quality and excellent X-ray dose management. Exams can be prepared, performed and completed in just three steps, combining highly efficient operation with rapid results.

View and verify the images on the 17" touch-screen – capable of displaying in full screen mode with just one click. Once confirmed, your images are sent wirelessly to the hospital's PAC system for quick and efficient diagnosis.



## Network security

Philips places critical importance on assuring the MobileDiagnost wDR is safe, secure and compliant for integration into any hospital network. In fact, it is the most secure mobile system we've ever created.

Enhanced security features include authentication based on keypad access for system on/off, hard drive encryption for secure data storage, isolated USB ports for plug and play accessories, and Windows 10 operating system for improved security.

## Tailored service agreements



Philips offers a broad range of RightFit Service Agreements. Choose from parts & labor plans with uptime guarantees, assist plans supporting your own in-house engineers, or full coverage plans letting Philips do all the work.

### Detector coverage

Philips offers a variety of wireless detector protection options in the event of accidental damage\* to a SkyPlate wireless detector.

### World class customer service

*\*Misuse terms and conditions apply*

# Technical specifications

## Mobile unit

Type	Mobile X-ray unit with sliding column X-ray tube arm and wireless portable detector
Dimensions (l x w x h) in parking position	Fixed column 1382 mm x 670 mm x 1960 mm (54.4" x 26.4" x 77.1") Sliding column 1382 mm x 670 mm x 1330 mm (54.4" x 26.4" x 52.4")
Wheel base length	600 mm (23.6")
Focal point distance from floor	53 to 202 cm (20.9" to 79.5")
Focal point distance to column	max: 1242 mm (48.9") min: 702 mm (27.6")
Tube column rotation	± 317°
Batteries	Separate batteries for drive and generator control
Power for charging	single phase 230/220/110/100 VAC ± 10%; 50/60Hz
System available for exposure while charging	
Keyless system access	
Fine positioning from tube head	
Anti-collision sensor and brake	
Dose Area Product (DAP) meter	

## Options

SkyFlow Plus scatter correction	
Remote control for exposure and collimator light	
Detector holders, grids, handle frame for SkyPlates	

## Generator and tube

Power: high frequency	20 kW
Tube voltage in steps of 1 kV	40 - 125 kV
mA range	10 to 320 mA
mAs range	0.1 - 500 mAs
Exposure times	With SkyPlate: 0.001 - 1.25 s With free cassette: 0.001 - 4 s
Anode heat storage capability	100 kJ (140 kHU)
Focal spot (small/large)	0.3 / 1.0

## Generator and tube

Power: high frequency	40 kW
Tube voltage in steps of 1 kV	40 - 150 kV
mA range	10 to 500 mA
mAs range	0.1 - 500 mAs
Exposure times	With SkyPlate: 0.001 - 1.25 s With free cassette: 0.001 - 4 s
Anode heat storage capability	220 kJ (300 kHU)
Focal spot (small/large)	0.7 / 1.3

## Eleva user interface

Monitor	17" touch-screen monitor
Image storage	up to 4,000 images
Generator control integrated into graphical user interface	more than 600 pre-programmable settings (APRs)
UNIQUE 2 multi-resolution image processing	
Hard drive encryption for data security	
Windows 10 operating system	

## Wireless portable detectors

### SkyPlate

Type	Digital Cesium Iodide (CsI)
Housing	Carbon fiber
Detector sizes	small: 24 cm x 30 cm (10" x 12") approx. large: 35 cm x 43 cm (14" x 17")
Active area	small: 22.2 cm x 28.4 cm (8.7" x 11.2") approx. large: 34.48 cm x 42.12 cm (13.6" x 16.6") approx
Image matrix size	small: 1500 x 1920 pixel large: 2330 x 2846 pixel large: 2156 x 2662 pixel
Detector pixels	small: 2.9 Megapixels large: 6.6 Megapixels
Image resolution	up to 3.38 Lp/mm
Pixel size	148µm
Weight (incl. battery)	small: 1.6 kg (3.5 lbs) large: 2.8 kg (6.2 lbs)
Maximum patient weight	100 kg (220 lbs) on 4 cm disk for weight bearing examinations 300 kg (662 lbs) for distributed load, e.g. chest examinations in bed (upto 150 kg on the detector)
Click-on grids in portrait or landscape orientation	

