

VAMC DENVER, CO
PO# 554-B40001

Line #	Description	Qty
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1	Mobile Diag DR High Perform	1
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MobileDiagnost wDR is a flexible, mobile X-ray system that provides the same image quality and full efficiency as Philips premium DigitalDiagnost DR rooms to acute areas of the hospital.

Streamlined processes are made possible thanks to the effortless procedures with the Philips wireless portable detector and seamless connection to the hospital network. With the easy to maneuver MobileDiagnost wDR, you'll reach every area of the hospital – and new levels of imaging flexibility.

MobileDiagnost wDR High Performance is the ideal solution for the full range of radiography applications including examinations on bariatric patients. The powerful 40kW generator enables shorter exposure times and thereby minimizing motion artifacts: excellent results can be achieved even for challenging examinations such as spine trauma as well as for critical patients. The base unit of the MobileDiagnost wDR provides several features aimed to ease the workflow, especially in ever-changing and hectic environments in Intensive Care Unit, Operation Room and Emergency Rooms. The MobileDiagnost wDR can be steered by just one hand. It responds quickly on speed and direction. This enables the user to move both quickly along long hallways as well as to perform nimble maneuvering in tight or narrow areas.

The innovative Eleva workspot of MobileDiagnost wDR lets you experience simplicity like never before. Designed with input from customers, it provides a clear and intuitive touch-screen user interface. It is easy to learn and use, and is highly configurable to adapt to particular needs and specific workflows, resulting in high efficiency.

The high workflow automation possible through the Eleva concept allows concentrating on patients instead of on the system. The touch-screen user interface, the integrated generator controls, and the automatic setting of exposure parameters provide quick and easy access to all functions a busy technologist needs to achieve an efficient workflow. In addition, the Eleva alternative workflow concept provides the flexibility to adapt to particular situations and change the planned examination protocol without readjusting any exposure settings.

Thanks to Philips outstanding UNIQUE (UNified Image QUality Enhancement) advanced multi-resolution image processing, images are always displayed fully processed. UNIQUE provides an optimal contrast harmonization with enhanced details, while the overall impression remains natural. As UNIQUE is part of most of digital X-ray products from Philips, the radiologist receives a similar image impression independent from the modality the image was taken on.

Main benefits at a glance

- 40 kW generator enables the user to image a wide range of patients from children to bigger patients minimizing motion artifacts with optimum exposure techniques
- Integrated generator controls and more than 600 Anatomical Programmed Radiation (APR's) for easy and safe system handling
- Customizable Eleva touch-screen user interface on 17 inch monitor
- Excellent image quality due to the exclusive UNIQUE image processing algorithms
- Manual collimator including filter disk for pediatric filters, LED light

- Laser alignment light for quick and easy indication of Source Image Distance (SID)
- Very easy to maneuver using just one hand
- Rotating column with extendable tube arm makes quick and exact positioning of the tube easy
- Fine positioning of the system: By pressing buttons on the tube head, the whole system moves towards the indicated direction without the need to go back to the mobile push bar
- Secure handling of the MobileDiagnost wDR as anti-collision sensors in the front of the system stop the system movement when detecting barriers
- Flexibility for integrating into the hospital network infrastructure either wirelessly or by using attached LAN cable
- Storage trays on the system allow carrying up to two grids, wipes, gloves, papers and other accessories. Storage trays can be removed and therefore easily cleaned and disinfected
- Wireless portable detector (to be selected separately) for easy cable-free positioning enabling high efficiency and workflow improvements due to fast image access at the patient's bed

Optional items for ideal use of the MobileDiagnost wDR

- Click-on grids in portrait and or landscape orientation
- Dose Area Product meter for dose reporting of output X-ray dose on the collimator
- Wireless remote control
- Accessories for even more comfortable positioning of the wireless detector (mobile detector holder and bed holder)

Specifications

- MobileDiagnost wDR base unit dimensions
 - Height: 198 cm / 78 inch
 - Width: 67 cm / 26.4 inch
 - Length: 137.5 cm / 54.1 inch
 - Wheelbase: 60 cm / 23.6 inch
 - Back wheel diameter: 43 cm / 17 inch
 - Rotation of column: $\pm 315^\circ$
 - Tube head rotation: $\pm 180^\circ$
 - Focal point distance from floor min: 55 cm / 21.7 inch; max: 202 cm / 79.5 inch
 - Focal point distance to column min: 70cm / 27.5 inch; max: 125 cm / 49.2 inch
 - Motorization: 0 - 5 km/h / 0 - 3.1 mph
 - Generator
 - 40kW generator
 - kV range: 40 - 150 kV in steps of 1kV
 - mA range: 10 - 500 mA
 - mAs range: 0.1 - 500 mAs
 - Exposure times: 0.001 s - 10 s
 - Frequency: 50/60 Hz
 - Tube
 - Rotary anode
 - Max 150 kVp
 - Dual focal spot: 0.7 and 1.3
 - Anode heat storage capabilities: 220kJ (300 kHU)
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- Collimator
 - Manually operable collimator with LED light field
 - Integrated filter disk (1 = no filter; 2 = 0.2 Cu + 1 AL; 3 = 0.1 Cu + 1 AL; 4 = 2 AL)
 - Indication light whether or not filter is inserted
 - Laser alignment indicates when reaching fixed Source Image Distance (SID) (default of 100 cm / 39 inch, configurable at installation)
- Eleva Workspot computer
 - Hard disk: 340 GB total
 - RAM storage capacity: 4 GB
 - Interfaces: WiFi, detector interface, LAN cable (Ethernet)
 - Monitor: 17 inch touch-screen monitor, 1280 x 1024 at 60 Hz
- Eleva Workspot
 - Eleva application and examination database software and licenses
 - Windows XP Embedded system software and licenses
 - UNIQUE advanced multi-resolution image processing
 - Dynamic reconstruction image processing software
 - Easy Workflow
 - Shutter and Image Verification tool
 - Antivirus software and license
 - User documentation
- Connection from wireless portable detector to MobileDiagnost wDR
 - Wireless
 - Isolated private wireless LAN (Wi-Fi)
 - Based on IEEE 802.11 a or g (configurable)
 - Data encryption: WPA2 encryption
 - Available channels: selectable at installation / depending on country allowance (can be configured according to hospital preference)
 - Wired connection via back up cable
- Connection from MobileDiagnost wDR to hospital network
 - Wireless
 - Standard network connection
 - Based on IEEE 802.11 g (configurable) and IEEE 802.1x (Enterprise Authentication), supported standards PEAP and EAP-TLS
 - System protection: Anti-virus software and firewall
 - Data encryption: configurable WEP or WPA2 encryption (up to CCMP/AES with PSK)
 - Static IP or Dynamic Host Configuration Protocol (DHCP)
 - Support for multiple wireless profiles, so the device is operable in distinct wireless networks without reconfiguration
 - Wired connection via LAN cable
 - Static IP or Dynamic Host Configuration Protocol (DHCP)
 - Optional Click-on grids 8/40/130
 - Ratio 8, 40 lines/cm (100 lines/inch), focus 130 cm (51 inch)
 - Available in portrait and landscape orientation
 - Landscape grid for use with source-image distance from 102 to 181 cm (40 to 71 inch)
 - Portrait grid for use with source-image distance from 97 to 198 cm (38 to 78 inch)

Comprising

- MobileDiagnost wDR base unit including 40 kW generator, workspot and 17 inch LCD-touch-screen monitor
- Software licenses
- Documentation
- Instruction for Use

Clinical Education Program for Mobile Diagnost wDR

Clinical Education Specialists will provide twenty-four (24) hours of Mobile Diagnost wDR (wireless portable system) OnSite Education for up to four (4) key operators, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available if the participant meets the guidelines provided by Philips. Depending on your system configuration, the first four (4) hours onsite may be spent configuring new equipment for specific clinical needs, as well as reviewing important safety features and quality procedures. Please read guidelines for more information. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Recommendations: In order to enhance customer satisfaction with image quality over the first year, we highly recommend that part# 989801292145, XR Add OnSite Clin Educ 16h is purchased. This training will assist the customer in maximizing the unique image quality pre-sets to suit their facilities needs. Clinical Education highly suggests the image quality visit occur two to four weeks post initial handover.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 645-110721

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Grid WPD 40/8/130 Portrait

1

Attachable, fixed grid in portrait orientation for the wireless portable detector.

Main benefits at a glance

- Easy to attach/detach to/from the wireless portable detector, thanks to its click-on mechanism
- For examinations where the detector is used in portrait orientation
- Can be used with source-image distance from 97 to 198 cm (38" to 78")
- Fiber interspaces and carbon fiber cover plates ensure higher contrast and lower required dose than conventional aluminium interspaces grids
- Combined with Philips advanced UNIQUE image processing and grid-line correction algorithm, it provides optimal image quality for increased diagnostic confidence

Specifications

- Fixed grid 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51")
- Fiber interspaces and carbon fiber cover plates
- Interspaces in portrait orientation
- Attenuation equivalent: = 2.4 mm Al
- Weight: 1.8 kg (3.9 lbs)

Comprising

- Attachable, fixed grid

Compatible with

- Wireless portable detector 35 x 43 cm (14 x 17")

3 **Grid WPD 40/8/130 Landscape** 1

Attachable, fixed grid in landscape orientation for the wireless portable detector.

Main benefits at a glance

- Easy to attach/detach to/from the wireless portable detector, thanks to its click-on mechanism
- For examinations where the detector is used in landscape orientation
- Can be used with source-image distance from 102 to 181 cm (40" to 71")
- Fiber interspaces and carbon fiber cover plates ensure higher contrast and lower required dose than conventional aluminium interspaces grids
- Combined with Philips advanced UNIQUE image processing and grid-line correction algorithm, it provides optimal image quality for increased diagnostic confidence

Specifications

- Fixed grid 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51")
- Fiber interspaces and carbon fiber cover plates
- Interspaces in landscape orientation
- Attenuation equivalent: = 2.4 mm Al
- Weight: 1.8 kg (3.9 lbs)

Comprising

- Attachable, fixed grid

Compatible with

- Wireless portable detector 35 x 43 cm (14 x 17")

4 **DICOM Package** 1

This package provides all DICOM features available with PCR Eleva:

DICOM Print, DICOM Image Export, RIS connection, MPPS.

For full description, please refer to the mentioned features.

Buying this feature once for the reader will make the functionality available on all workspots that have been purchased for this reader.

Compatible with:

- PCR Eleva software release 1.0 and above

Comprising:

DICOM WLM & Classic RIS

Interface to Radiology Information System (RIS).

Worklist handling via a DICOM Basic Work List Management (BWLM) or FTP RIS interface.

The DICOM & Classic RIS connection package allows the Eleva workspot to automatically load the acquisition modality's worklist from a RIS server. The worklist query can be performed 'broad' (generic) or specific (patient oriented), and both interactively (on operator request) and automatically (in background).

For further details on DICOM BWLM, please refer to the system DICOM Conformance Statement.

Buying this feature once for the system will make the functionality available on all workspots that have been purchased for this system.

Comprising:

- DICOM Worklist Management software license
- FTP RIS Interface software license

Compatible with:

- PCR Eleva software release 1.0 and above
- Essenta DR release 1.0 and above

DICOM MPPS

DICOM Modality Performed Procedure Step (MPPS)

DICOM service for notifying the RIS server about start and end of performed procedure steps.

The messages contain references to the originating worklist items (patient and procedure data), a list of exported DICOM images and post exposure data.

MPPS requires that the DICOM WLM feature is enabled.

For further details, please refer to the system DICOM Conformance Statement.

Buying this feature once for the system will make the functionality available on all workspots that have been purchased for this system.

Comprising:

- Software license

Compatible with:

- PCR Eleva software release 1.0 and above
- Essenta DR release 1.0 and above

Generator Data will not be reported automatically for Essenta DR and PCR Eleva!

DICOM Image Export

DICOM Storage and DICOM Storage Commitment

The DICOM Image Export feature provides the DICOM Storage service to send images to PACS or any other DICOM destination in DICOM format.

The Eleva workspot supports DICOM Greyscale Display Standard. Calibration of Eleva workspot and the receiving DICOM node will result in consistently same high image quality.

DICOM Image Export also includes the DICOM Storage Commitment service, allowing the Eleva workspot to be informed by storage destination if images have been securely stored. This trigger is used by the Eleva workspot to allow related images to be deleted locally.

For further details, please refer to the system DICOM Conformance Statement.

Buying this feature once for the reader will make the functionality available on all workspots that have been purchased for this system.

Comprising:

- Software license

Compatible with:

- PCR Eleva software release 1.0 and above
- Essenta DR release 1.0 and above

DICOM Print

DICOM Print interface for manual and automatic printing.

DICOM Print allows for manual and automatic printing directly from the Eleva workspot. It enables the user to transfer images to a networked DICOM imager with the choice of different printing modes:

- Autoprint: automatic printing of images on predefined film layouts according to the examination
- Manual print: Manual image placement on predefined film layouts or image placement on free layout composing.

For further details, please refer to the system DICOM Conformance Statement.

Buying this feature once for the system will make the functionality available on all workspots that have been purchased for this system.

Comprising:

- Software license

Compatible with:

- PCR Eleva software release 1.0 and above
- Essenta DR release 1.0 and above
- For compatible printers see product info

Technical Data:

- Only printing via DICOM protocol is possible.

This powerful image statistic tool provides the advanced user with functionality to analyze rejected images regarding operators and rejection reasons. It serves as well for monitoring and analyzing general parameters. The data files can be downloaded in standard format for further usage or archiving on a PC.

It perfectly supports the quality standards of the department and teaching situations.

Buying this feature once for a system will make the functionality available on all Eleva workspots that have been purchased for this system.

Note: for Essenta DR, Essenta DR Compact, EasyUpgrade DR and PCR Eleva systems, generator data will not be reported automatically.

Comprising

- Software license

Compatible with

- DigitalDiagnost 2.0 and above
- DuraDiagnost 1.0 and above
- Essenta DR 1.0 and above
- Essenta DR Compact 1.0 and above
- MobileDiagnost wDR
- EasyUpgrade DR 1.0 and above
- PCR Eleva 1.0 and above

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Mobile wireless portable detector set

1

Philips wireless portable detector is part of the Eleva platform and defines a new dimension of flexibility and freedom within the radiography room.

Main benefits at a glance

- DR speed and excellent image quality with the positioning flexibility of CR
- Reduced patient infection risk and easy handling thanks to the detector's cable-free design
- Everlasting connection, no broken cable
- Easy handling for exposures in bed or wheelchair
- Flexible positioning for lateral or oblique projections
- Instant image display
- State-of-the-art CsI detector technology and UNIQUE image processing for optimal image quality at the lowest dose
- Easy, precise and safe positioning around the patient, even for difficult projections, provided by a rich set of dedicated accessories
- Wireless portable detector sharing license, to use the wireless detector on another compatible Philips X-ray system

The wireless portable detector covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17"). Depending on anatomy, it can be positioned in different orientations and offers full diagnostic information even with large patients. Combined with Philips advanced UNIQUE image processing, grid-line correction algorithm and state-of-the-art Cesium Iodide (CsI) technology, it

has an excellent quantum efficiency (DQE) and helps to reduce the required patient dose. It provides instant image display with superb image quality on the Eleva workspot for increased diagnostic confidence.

Thanks to its cable-free design, the wireless portable detector allows quick and efficient procedures with high hygienic standards. The integrated handle on the detector, its robust design and a rich set of optional dedicated accessories (mobile holder, bed holder, click-on grids and hygienic bags) offer easy, safe and quick positioning throughout the hospital. Special projections like laterals can easily be performed without moving the patient. Its slim design is optimized for critical environments and minimizes the risk of interfering with life supporting equipment, cables, tubes and catheters.

The detector features advanced low-power WiFi connection technology and is designed according to IEC 60601-1-2. It is compliant with life supporting devices and with pacemakers designed according to IEC (EN) 45502-2-1. The detector battery is automatically recharged when the detector is placed in its wall-mounted docking station and can be used up to 2.5 hours without charging. An additional backup cable connection allows instant image transfer in case WiFi connection is not available or the battery power gets low.

To protect a wireless portable detector investment, Philips is offering an optional dedicated accident protection program. Especially for frequent usage and when sharing the detector between rooms or systems, it prevents hospitals from high replacement costs in case the wireless portable detector is damaged from an accidental drop.

The wireless portable detector sharing license gives system use flexibility and optimizes investment costs in the department, allowing taking the wireless portable detector from the system and using it with other compatible Philips MobileDiagnost wDR, DigitalDiagnost or EasyDiagnost systems. Compatible systems need to have software with the sharing feature, as well as a sharing license to participate in wireless portable detector sharing.

Specifications

- 35 x 43 cm (14 x 17") wireless portable digital flat detector with Cesium Iodide (CsI) technology, active detector area 34.1x43.2 cm (13.4x17"), resolution 7.1 megapixel (2372x3000 pixels), pixel pitch 0.144 mm, pixel depth 16 bits
- Image resolution: up to 3.47 line pairs per mm
- Weight: 4.8 kg (10.6 lbs) including battery
- Maximum patient weight: 100 kg (220 lbs) for weight-bearing examinations
- WLAN network standard: IEEE802.11 a or g (configurable)
- Encryption: default WPA2
- Optional click-on grids 8/40/130: ratio 8, 40 lines/cm (100 lines/inch), focus 130 cm (51") for use with source-image distance from 110 to 180 cm (44" to 56"), available in portrait and landscape orientations

Comprising

- Wireless portable detector 35 x 43 cm (14 x 17")
- Battery and backup cable
- Set of 100 hygienic bags for the Wireless portable detector
- Software licenses

- Wireless portable detector sharing license
- Documentation

Compatible with

- MobileDiagnost wDR release 1.x

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FIPS 140-2 validated

1

According to the needs of governmental institutions in the United States of America, the MobileDiagnost wDR includes cryptography modules that are validated against requirements of the Federal Information Processing Standard (FIPS) 140-2. Thereby, the wireless connection of the MobileDiagnost wDR to the hospital network uses a validated cryptography to fulfill the requested network security.

Due to technical constraints, the FIPS validated wireless connection can be operated with wireless connection protocols according to IEEE 802.11a, b and g. IEEE 802.11n cannot be supported.

Specifications

- Wireless chip: Intel-Pro Wireless
- Wireless supplicant: 3eTI Model 3e-010F-E-4 Version 3.1.6 including validated cryptographic modules

Comprising

- Software License
- Specific FIPS 140-2 WiFi Card
- Documentation

Compatible with

- MobileDiagnost wDR release 1.x

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Dose Area Product Meter

1

The Dose Area Product meter for MobileDiagnost wDR measures the X-ray dose output at the collimator and reports the measured Dose Area Product (mGy*m²) to the DICOM header of the image. It is also displayed in the Eleva user interface. With this optional DAP meter, technologists can easily check the X-ray dose and perform more accurate dose reporting.

Specifications

- Dimensions: width: 170 x 170 mm / 6.7 x 6.7 inch; height: 18 mm / 0.7 inch. Active area: 147 x 147 mm / 5.8 x 5.8 inch
- Energy range of tube voltage: 40 – 150 kV

- Light transparency: > 70 %

Comprising

- Chamber Dose Area Product meter
 - Software License
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Line #	Description	Qty
1	Airfare to Cleveland for Biomed Training	1
	Includes one (1) participant's airfare from North American customer location to the Cleveland Training Center (CTC) in Cleveland, Ohio. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Expires one (1) year from the earlier of equipment delivery date or purchase date.	
2	Food Transpt Lodging for Cleveland Biomed Training	5
	Includes one (1) day of modest lodging, ground transportation, and meal expenses in Cleveland, Ohio for one (1) attendee. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Although this part is only for one day, it is sold in multiple quantities to account for entire length of course. Expires one (1) year from the earlier of equipment delivery date or purchase date.	
3	XD3687 Bio Mobile DiagwDR CTC5	1
	Course Number: XD3687 System Codes: 712001 Course Title: MobileDiagnost wDR Course Length: 5 days (excludes Saturdays, Sundays, and Philips holidays) Delivery Method(s): Instructor-Led Modality: DXR Location: PHC, CTC Target Audience: Service Engineers	

DESCRIPTION:

The customer service engineer is trained to a technical and application level which will enable him to Install, perform setting to work, operate and troubleshoot the MobileDiagnost wDR system.

