

Line #	Description	Qty
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1	Mobile DR 2.1 Performance	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 SkyPlates - wireless portable detectors 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 Performance is suited for all standard radiography applications. It is equipped with a 20 kW generator and suitable tube with 0.3 and 1.0 focal spot, making it fit to pediatric examinations. 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 Units, Operation Rooms and Emergency Rooms. Thanks to its integrated charging possibility, one battery for SkyPlates can always be charged, even during operation.* 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. Zoom in and out your image with two fingers - just as on your tablet or smartphone.* It is easy to learn and use, and is highly configurable to adapt to particular needs and specific workflows, resulting in high system efficiency.

The high workflow automation possible through the Advanced 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 based on patient and examination information coming from the RIS, 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.

The Philips Eleva Workflow plus package provides smart tools for an improved and fast workflow and is complementary to the Advanced Eleva functionality standardly provided with the X-ray system. Especially designed for high throughput environments, the Eleva Workflow plus package helps the user to focus on the patient and the examination instead of on system handling and workflow. Automatic markers are generated, displayed and stored/ printed automatically for CR and DR images. The intuitive RIS- code learning feature allows for "on-the-fly" configuration of new or changed RIS codes directly within the worklist environment. The RIS can be filtered on a detailed level for improved schedule planning and fast access to specific patient information. The "Generator only" mode allows additionally for free exposures on e.g. CR cassettes or film cassettes without the need to schedule the patient in the system worklist. Furthermore, the Eleva Workflow Plus package allows access to Eleva's "advanced user" environment for individual customization and configuration of the user interface, such as tool bar configuration, user management, analyzing system statistics and adaptation of the anatomical data base and image processing.

The Philips Eleva Review plus package was developed for workflows where intense image review plays an important role. Dedicated tools help to manipulate, compare, measure and prepare images before being archived in a PACS or being printed on film. The full screen mode allows for improved clinical review and quality management of images. Thanks to the multiple image display (display 1, 2 or 4 images), previous images can be directly compared to newly acquired images. Additional zoom and pan functions, dedicated zoom settings to the point of interest, size calibration and extended measurement functions like distance and angle are required for precise quantitative image analysis. Semi-automatic rotation and free image rotation in 0.5 degree steps provide fast image correction in the case of angulated or oblique projections. Annotations such as free text or pre-defined markers (e.g. L/R) can be customized and freely placed within images.

The simple ranger tool allows for dedicated image processing of an anatomically relevant image area for optimal display of challenging structures, e.g. metal implants or small foreign particles.

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.

The Eleva Advanced Dose Reporting allows printing of the individual patient dose report as well as the cumulative daily dose reports via network connection on a paper printer in PostScript format (not part of this package) for easy dose management.

MobileDiagnost wDR provides built-in privacy according to HIPAA recommendations, and security and interoperability standards. It integrates seamlessly into the hospital network and provides embedded antivirus software as well as restricted access to prevent the system from unauthorized use. It supports connection to a Radiology Information System (RIS), to DICOM-compatible diagnostic units and archives and to DICOM imagers, according to the relevant IHE profiles.

Main benefits at a glance

- SkyPlate large and small compatible, storage with and without grid attached
- Charging of one SkyPlate battery on the MobileDiagnost wDR*
- 20 kW generator to cover all standard radiography applications
- 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.

- SkyPlate (to be ordered 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 SkyPlate
 - (mobile detector holder and bed holder)

Specifications

- MobileDiagnost wDR base unit dimensions
 - Height: 198 cm / 78 inch, or 185 cm / 73 inch with short column option
 - 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
 - 20kW generator
 - kV range: 40 - 125 kV in steps of 1kV
 - mA range: 10 - 320 mA
 - mAs range: 0.1 - 500 mAs
 - Exposure times: 0.001 s - 10 s
 - Frequency: 50/60 Hz
- Tube
 - Rotary anode
 - Max 125 kVp
 - Dual focal spot: 0.3 and 1.0
 - Anode heat storage capacity: 100 kJ (140kHU)
- 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 7 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 SkyPlate 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)
 - Wired connection via LAN cable
 - Static IP or Dynamic Host Configuration Protocol (DHCP)
- Optional SkyPlate Click-on grids
 - SkyPlate large, fixed grid 44/8/130 in portrait orientation: 44 lines/cm (112 lines/inch), ratio 8, focus 130 cm (51 inch), for source-image distance from 96 to 203 cm (38 to 80 inch)
 - SkyPlate large, fixed grid 40/8/130 in landscape orientation: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51 inch), for source-image distance from 100 to 185 cm (39 to 73 inch)
 - SkyPlate small, fixed grid 40/8/130 in portrait orientation: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51 inch), for source-image distance from 84 to 291 cm (33 to 115 inch)

Comprising

- MobileDiagnost wDR base unit including 20 kW generator, workspot and 17 inch LCD-touch-screen monitor
- Software licenses
- Documentation
- Instruction for Use

*Please note that battery charging on the MobileDiagnost wDR will become available in Q3/2014. All MobileDiagnost wDR Release 2 systems will receive this functionality as a free-of-charge upgrade once available.

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

2

Sliding Column

1

Sliding column allows customers to have a clear view while driving, easy access to all areas of hospital ie door clearance and makes parking/storing easy.

- Height: 135 cm /52.9 inch
- Width: 67 cm / 26.4 inch
- Length: 127.5 cm/ 52.2 inch

An upgrade to the regular column height of 198 cm / 78 inch is not possible.

Comprising

- Sliding Column
- Documentation

Compatible with

- MobileDiagnost wDR release 2.X and above

3

SkyPlate Large (35 x 43 cm, 14 x 17 inch)

1

Philips SkyPlate is the next generation of wireless portable detectors. It is an integrated 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
 - ISO compliant cassette size format (35 x 43 cm, 14 x 17 inch) to fit into standard operating room tables
 - Reduced patient infection risk and easy handling thanks to the detector's cable-free design
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- Easy handling for free exposures
- 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
- Robust shell of the detector to protect it from water drops and dust
- Easy, precise and safe positioning around the patient, even for difficult projections, provided by a rich set of dedicated accessories
- SkyPlate sharing license, to use the wireless detector on another compatible Philips X-ray system

The SkyPlate large covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17 inch). 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 removal algorithm and state-of-the-art Cesium Iodide (CsI) technology, it has an excellent detective quantum efficiency (DQE) and helps to reduce the required patient dose. It provides instant image display with superb image quality on the Eleva workspace for increased diagnostic confidence.

Thanks to its cable-free design, the SkyPlate allows quick and efficient procedures with high hygienic standards. Its robust design and a rich set of optional dedicated accessories (mobile holder, bed holder, attachable 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 designed according to IEC 60601-1-2 and with pacemakers designed according to IEC (EN) 45502-2-1 when keeping indicated distances. The SkyPlate battery can be removed and recharged in the battery charging station. Once a battery is empty, a new one can be inserted to immediately continue working with the SkyPlate.

SkyPlate sharing allows taking the SkyPlate from the system and using it with other compatible Philips MobileDiagnost wDR, DigitalDiagnost or ProGrade systems. Thereby, SkyPlates can be used efficiently wherever needed and help driving down investment costs. Compatible systems need to carry the SkyPlate Sharing license to participate in SkyPlate sharing.

Specifications

- Size: 35 x 43 cm (14 x 17 inch) SkyPlate large wireless digital flat detector with Cesium Iodide (CsI) technology, active detector area 34.48 x 42.12 cm (13.6 x 16.6 inch) (2330 x 2846 pixels), pixel pitch 0.148 mm
- Image resolution: up to 3.38 line pairs per mm
- Maximum patient weight: 100 kg (220 lbs) for weight-bearing examinations
- WLAN network standard: IEEE802.11 a, b, g or n (configurable)
- Encryption: default WPA2
- Optional attachable grids
 - Portrait orientation: 44/8/130: 44 lines/cm (112 lines/inch), ratio 8, focus 130 cm (51 inch)
 - Landscape orientation: 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51 inch)

Comprising

- SkyPlate large 35 x 43 cm (14 x 17 inch)
- Two exchangeable batteries
- Set of 100 hygienic bags
- Software licenses
- SkyPlate sharing license
- Documentation

Compatible with

- DigitalDiagnost Release 4.x, MobileDiagnost wDR Release 2.x, ProGrade 1.x
- Attachable grids for SkyPlate 35 x 43 cm (14 x 17 inch) in portrait and landscape orientation

4

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

5

Package incl. Print, Image Export, WLM, MPPS,Media

1

This package provides all DICOM communication features available with the Eleva platform:

- DICOM Worklist Management
- DICOM MPPS
- DICOM Image Export (including Storage Commitment)
- DICOM Print
- DICOM Media

For further details, please refer to the DICOM Conformance Statement.
Buying this feature once for a system will make the functionality available on all Eleva workspots that have been purchased for this system.

DICOM Worklist Management

Interface to Radiology Information System (RIS).
Worklist handling via a DICOM Basic Worklist Management (BWLM).

The DICOM connection 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 the background).

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 Worklist Management feature is enabled.

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

DICOM Image Export

DICOM Storage and DICOM Storage Commitment

The DICOM Image Export feature provides the DICOM Storage service to send images to PACS, archive 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.

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

Please note that only printing via DICOM protocol is possible.

DICOM Media

Write media in DICOM format.

This feature provides the possibility to write all Patient images, Studies and single images onto CDs or DVDs directly on the Eleva workspot.

The Eleva workspot will burn CDs or DVDs, which comply to the DICOM Media Interchange format.

Each CD or DVD will include a standalone Philips DICOM viewer.

Viewing the CD or DVD content will be possible on:

- Any workstation that supports the DICOM Media Interchange format
- Any standard PC with the help of the Philips DICOM viewer on the CD or DVD

Please note that viewing images from CD or DVD will not be possible on the Eleva workspot directly.

Comprising

- DICOM Worklist Management software license
- DICOM MPPS software license
- DICOM Image Export software license
- DICOM Print software license
- DICOM Media software license

Compatible with

- DigitalDiagnost 4.0 and above
- DuraDiagnost 2.0 and above
- MobileDiagnost wDR 2.0 and above
- ProGrade 1.0 and above

6

Dose Reporting in DICOM Structured Report format

1

This DICOM service allows exporting patient radiation dose details in the Structured Report DICOM standard format.

Main benefits at a glance

- Standard, modern and comprehensive format for exporting patient radiation exposure information
- Exports dose information on study (accumulated) and exposure levels
- Allows detailed exposure dose monitoring on the PACS or dedicated dose management system

Typically, one dose report is created at the end of each procedure step performed on the system. This dose report collects together all the irradiation events from the procedure step and cumulates all dose values for the procedure step as a whole.

By exporting patient radiation dose in a comprehensive, very detailed and standard format, DICOM Structured Report allows to perform precise dose monitoring and analysis on the PACS or with a dedicated dose management system. This assists institutions to ensure their policies, procedures and protocols are adequate and being followed appropriately in the department. Moreover, it can help determining how changes in techniques and protocols impact radiation dose as well as image quality, to maintain patient doses As Low As Reasonably Achievable (ALARA).

Comprising

- Software license

Compatible with

- DigitalDiagnost 3.1 and above
- MobileDiagnost wDR 1.1. and above (Dose Area Product Meter required)
- EasyDiagnost 5.0
- ProGrade Rel 1 and above

7

**Clinical Quality Control
software**

1

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
- DigitalDiagnost C50
- 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
- ProGrade Rel 1 and above

8

Grid Portrait SkyPlate Large

1

Attachable, fixed grid in portrait orientation for SkyPlate large 35 x 43 cm (14 x 17").

Main benefits at a glance

- Easy to attach/detach to/from the SkyPlate, thanks to its click-on mechanism
 - Convenient handle for safe and easy handling
-

- For examinations where the detector is used in portrait orientation
- Can be used with source-image distance from 96 to 203 cm (38 to 80 inch)
- 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 44/8/130: 44 lines/cm (112 lines/inch), ratio 8, focus 130 cm (51 inch), for source-image distance from 96 to 203 cm (38 to 80 inch)
- Fiber interspaces and carbon fiber cover plates
- Interspaces in portrait orientation
- Dimensions: 46.8 x 47.6 x 2.5 cm (18.4 x 18.8 x 1 inch), including handle
- Weight: 1.9 kg (4.2 lbs)

Comprising

- Attachable, fixed grid

Compatible with

- SkyPlate large 35 x 43 cm (14 x 17")

Line #	Description	Qty
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1	Grid Landscape SkyPlate Large	1
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Attachable, fixed grid in landscape orientation for SkyPlate large 43 x 35 cm (17 x 14").

Main benefits at a glance

- Easy to attach/detach to/from the SkyPlate, thanks to its click-on mechanism
- Convenient handle for safe and easy handling
- For examinations where SkyPlate is used in landscape orientation
- Can be used with source-image distance from 100 to 185 cm (39 to 73 inch)
- 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 inch), for source-image distance from 100 to 185 cm (39 to 73 inch)
- Fiber interspaces and carbon fiber cover plates
- Interspaces in landscape orientation
- Dimensions: 46.8 x 47.6 x 2.5 cm (18.4 x 18.8 x 1 inch), including handle
- Weight: 1.9 kg (4.2 lbs)

Comprising

- Attachable, fixed grid

Compatible with

- SkyPlate large 35 x 43 cm (14 x 17")