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Digital Diagnost 3.1

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Digital Diagnost

DigitalDiagnost is a premium direct digital radiography system with flat detector technology, based on modular components to allow for customization for all radiographic applications and workload requirements. It benefits from years of developmental experience and suggestions from satisfied customers all over the world who have had conventional and digital Philips Bucky systems.

The system combines all the advantages of a digital radiography unit with the latest Philips advanced features for easy and ergonomic workflow. Please note that depending on the particular room setup chosen, some options might not be available or already be included in the setup.

Main benefits at a glance

- Flexible component-based geometry to fit specific needs
- High efficiency and high patient throughput due to powerful automated features
- Uncompromising ergonomics due to complete system integration and special design
- Integrated one, two or three Cesium Iodide (CsI) digital flat panel detector(s), depending on setup
- Ample detector area for full diagnostic information even with large patients processing for comparable image impression
- Dose reduction due to high detector quantum efficiency
- Various generators and tubes, depending on setup
- Ceiling suspension with handy handle, control buttons, and release brake, as well as convenient color-coding of movements
- Wide 16.5 cm (6.5") LCD display on tube head for clear information and statuses
- Integrated centering laser in the tube head for easy positioning
- Very high image quality due to state-of-the-art detector technology and exclusive UNIQUE image processing
- Decrease in the number of repeat exposures due to the reduction of overexposed and underexposed images
- Total radiation dose monitoring by an integrated area dose calculator
- Customizable Eleva touch screen user interface
- Flexibility for integrating into hospital network infrastructure

The innovative Eleva workspot of DigitalDiagnost 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 room 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 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.

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. When used in combination with Philips integrated CR, it provides a comparable image impression for all CR and DR images.

The ceiling suspension carrying the X-ray tube allows the freedom for a wide range of longitudinal and transverse movements in the room, allowing performing table and vertical stand examinations, as well as lateral projections and free exposures using the wireless portable detector or PCR cassettes. Thanks to a four-part telescopic column and an award-winning control handle, the system can be operated with only one hand and easily positioned close to the patient. The clear and wide LCD information display and controls on the tube head, combined with the Eleva alternative workflow concept, automatic tube tracking, detector alignment and move to position functions, provide high projection flexibility plus quick and easy handling. A convenient room height adjustment at installation allows the system to fit almost any room height, to achieve the necessary source-image distance above the table, and to go down to the floor for lower extremity work.

DigitalDiagnost 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.

Specifications

- BuckyDiagnost CS III Ceiling Suspension
 - Four-part aluminium telescopic column with spring counter balanced holder for X-ray tube assembly, adaptable to individual room heights
 - Ceiling height at source-image distance 110 cm (44"): 2.65 m to 3.20 m (8' 8.3" to 10' 5.9")
 - Minimum ceiling source distance: 87.1 cm (34.3")
 - Possible room height adjustment: 37.5 cm (14.8")
 - Lowest tube position: 30 cm (11.8") measured from center of beam to the floor
 - Length of rails: base rails 4.3 m (14' 1.3"), optional rails extension 2.7 m (8' 10.3")
 - Longitudinal travel: 3.44 m (11' 3.4"), 6.14 m (20' 1.7") with rails extension option
 - Transverse travel: 1.50 m (4' 11") with short transverse rails, 3.22 m (10' 6.7") with long transverse rails
 - Vertical travel: 1.65 m (5' 5.2")
 - Rotation of focal spot around vertical axis of column: 360° (±180°), with rotation stop +180°/-165° and lock position every 45°
 - Angulations of focal spot around horizontal axis: ±125°, lock positions 0° and ±90°
 - Control handle
 - Centering device in longitudinal and transversal directions
 - Brake/locking controls and central three-axis brake-release at lowest position of handle
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- Wide 16.5cm (6.5") LCD information display and control buttons
- Collimator
 - Motorized automatic collimation, manual override possible, with light field indicator
 - Angle of aperture and rotation: 2 x 15°, ±45°, depending on the collimator (see type number plate)
 - Timer switch: up to 30 s
 - Inherent filter value: <0.3 mm 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
 - Source-image distance measurement tape
- Eleva workspot computer
 - Processor: Intel® Core2 Duo SP 9300 (2.26 GHz, 6 MB L2 Cache) or better
 - Hard disk: 250 GB SATA, 4 GB used for operating system and application software
 - Image storage: 200 GB for typically 4000 images
 - 4 GB memory
 - CD drive
 - Ethernet 10/100/1000 Base-T Gigabit
 - Geometry interface
 - Detector interface
 - Integrated generator control
 - Memory stick support for quality control
 - Keyboard and mouse

Comprising

- BuckyDiagnost CS III Ceiling suspension
 - Four-part telescopic column
 - X-ray tube assembly with collimator
 - Control handle with buttons and LCD screen
 - Rail system
 - Installation cables and high voltage cables
 - Set of marker for preferred source-image distance
- Eleva workspot
 - Eleva workspot computer, keyboard and mouse, cables
 - 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
 - Instruction for use
 - Quick reference guide
 - User documentation

CS Base Rails 4,3 m (14' 1.3")

For longitudinal carriages of CS monitor ceiling suspension or auxiliary ceiling suspension; length 4.3 M.

Comprising:

- 2 CS rails
- Adjustable end/stops
- Spacer strips
- Fixing parts
- Brake rails

Compatible with:

- CS 2 CS 4
- Monitor ceiling suspension
- Rail extension 9890 010 01622
- Rail for cable carrier 9890 010 02422

Eleva Exam. Control Advanced

The Eleva examination Control Advanced combines brilliant image display and excellent ergonomics.

Main benefits at a glance

- Takes full advantage of Eleva advanced user interface and ease of use
- Optimizes space in the control room, workflow and efficiency
- Touch technology compatible with rubber gloves
- Wide screen size
- Wide viewing angle
- Calibrated according to DICOM GSDF standard for better image fidelity
- Qualified for second reviewing
- Clear to read & easy to clean glass surface

Its smart design combines two consoles in one, allowing space saving in the control room and a more efficient workflow: the flat 19" LCD color display provides touch screen technology for intuitive and efficient use and the sturdy hardware buttons on the frame offer integrated control of the generator to modify the most frequently adjusted exposure parameters.

For more convenience during particular procedures like trauma, the microwave touch screen technology allows touch use also with rubber gloves. The glass plate in front of the screen ensures clear display and ease of cleaning.

Specifications

- 19" flat panel color TFT LCD display
- Resolution 1280 x 1024 pixels
- Luminance 220 cd/m²
- Hardware buttons commands: on/off, default examination, help, adjust kV, adjust mA, adjust mS, last used values

Comprising

- Active Matrix TFT LCD display with anti-reflex touch front, hard coated top sheet
- Integrated hardware buttons for control of exposure parameters
- Integrated hardware buttons for system power on/off and help
- Software licenses
- User documentation

Uninterruptible Power Supply (UPS) for the Eleva workspot computer and monitor

The device provides emergency power to the Eleva workspot in case of electrical network power failure, allowing to bridge time to safely store images and complete the last tasks.

It provides instantaneous protection from input power interruptions by means of an integrated battery and electronic circuitry, allowing to continue working for approximately 60 minutes.

Specifications

- Allows using the Eleva workspot for approximately 60 minutes after main power interruption
- Typical charging time: approximately 4 hours
- Typical heat emission: 4 W (5 W max) in standby, 86 W (99 W max) in operation
- Dimensions: depth 48.3 cm (19"), width 21 cm (8.3"), height 43.2 cm (17")
- Weight: 25 kg (55 lbs)

Comprising

- UPS device including holder for vertical positioning, power cable

Cable Carrier CS

Additional carrier for suspension of cable hose from CS 2/4 or TV- monitor.

Comprising:

- Carriage for CS- ceiling rail with adapter for different cable hoses

CABINET BOX

Pre-deliverable mounting material.

XR Handover OnSite Educ 28h

Clinical Education Program for Radiography Systems

Handover OnSite Education: Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include any OffSite education attendees if applicable. 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. Site must be patient-ready. 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 # 522-100614

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Digital TH table with tray for WPD

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Philips height-adjustable TH digital table has a proven and smart design that makes no compromise on robustness, quality and work efficiency, even with challenging patients and difficult examination conditions. It allows a variety of routine skeletal table examinations.

Main benefits at a glance

- X-ray from head to toe, for all radiographic applications
- Easy fine positioning through an eight-way floating tabletop with wide movement range
- Two tabletop widths available, 75 cm (29.5") or 85 cm (33.5")
- Wireless tray to place and automatically recharge a 35 x 43 cm (14 x 17") Philips wireless portable flat detector
- Easy-to-operate tray, allowing the positioning of the wireless portable detector in portrait or landscape orientation
- Wireless portable detector can be taken out of the table at any time for free exposures
- Motorized height adjustment
- Easy horizontal and vertical patient positioning with large movement range
- Extremely robust with maximum patient load of 375 kg (820 lbs)
- Hands-free operation via large footswitches
- Footswitches lock button to avoid accidental movements and ensure patient security
- Optional hand switch controlling all movements, which can be clamped at any place on both tabletop sides
- Three-field automatic exposure control chamber for optimal image quality and dose
- Automatic tube height adjustment depending on table height (tracking)
- Automatic collimation for X-ray beam limitation to digital flat detector, according to pre-programmed examination parameters
- Removable grid for optimal image quality and dose
- Convenient grid storage within the detector unit for immediate and safe storage
- Electromagnetic brakes for a high level of patient security

The floating tabletop provides significantly more coverage due to a wide travel range, allowing quick and effortless positioning. Thus the patient can be better examined and not moved during the examination, which is particularly important for emergency and trauma. The high weight capacity enables examination of bariatric patients.

safe working height. The lowest position allows loading a patient who is in a wheelchair. All motorized height movements and floating tabletop are activated with wide and easy-to-use footswitches. The footswitches can be locked for more safety during examination.

An integrated three-field automatic exposure control chamber ensures optimum image quality at the lowest possible dose even for difficult projections. The removable grid can be conveniently and safely stored directly in the detector unit.

The integrated wireless tray allows placing a Philips wireless portable detector in portrait or landscape orientation, to offer full diagnostic information even with large patients. The detector battery is automatically recharged when the detector is placed in the tray or in its wall-mounted docking station. At any time, the detector can be taken out of the table tray to perform free exposures in the room with high flexibility, even for the most challenging projections. This feature is particularly useful to perform laterals, oblique, weight bearing feet or examinations in bed or wheelchair.

Specifications

- Maximum patient weight: 375 kg (820 lbs) in static center position, 318 kg (700 lbs) in center with all movements, 210 kg (460 lbs) off center with all movements
- Motorized height adjustment from 51.5 to 91.5 cm (20.3" to 36")
- Floating tabletop of sandwich design with Getalit overlay
- Tabletop size: 240 x 75 cm (7' 10.5" x 29.5"), optional wide tabletop 240 x 85 cm (7' 10.5" x 33.5")
- Tabletop travel: longitudinal ± 60 cm (± 23.6 "), transverse ± 13 cm (± 5.1 ") or ± 18 cm (± 7.1 ") with optional wide tabletop
- Tabletop attenuation equivalent: = 0.75 mm Al (at 100 kV)
- Tabletop edge section: flat locking rails for attaching Philips accessories
- Wireless tray where a Philips wireless portable detector can be placed in portrait or landscape orientation
- Footswitches functions: table height adjustment up/down, disengagement of tabletop brakes in longitudinal and transverse directions, ability to switch on cross light in the collimator (all footswitches), footswitch interlock
- Optional hand switch: all footswitch functions for manual operation at the backside of the table
- Detector horizontal travel range: ± 22.7 cm (± 8.9 ")
- Removable grid 40/12/110: 40 lines/cm (100 lines/inch), ratio 12, focus 110 cm (44") for use with source-image distance from 90 to 150 cm (36" to 59")

Comprising

- Digital BuckyDiagnost TH height-adjustable table base and tabletop
- Tray for wireless portable detector
- Default grid 40/12/110: 40 lines/cm (100 lines/inch), ratio 12, focus 110 cm (44"). A different default grid can be chosen in order questionnaire. Additional grids are available in accessories.
- Software licenses
- Documentation

With the VM multipurpose stand extension, Philips redefines the benchmark for high performance rooms with a highly flexible configuration. An outstanding concept featuring a unique movable vertical stand, easy handling and excellent ergonomics, open new perspectives like never before, without any application limitations.

Combined with the Digital TH table, this versatile system is designed for environments with high patient load. It features a revolutionary moveable multi-purpose vertical stand with an integrated detector, which can be used around the table for a perfect complement of the table detector, or away from table for all kind of general x-ray procedures.

Main benefits at a glance

- Vertical stand sliding on a floor-mounted rail, optimal for all general X-ray examinations like chest, wall Bucky applications, table work, cross table laterals, and angulated projections
- Optional single-side suspended, motorized height-adjustable TH-S table, with wide floating tabletop, especially designed to use in combination with the VM movable vertical stand
- Movable vertical stand column sliding on a rail along the table for easy placement in various positions at the table or away from the table
- Swiveling detector arm and detector tilting on both horizontal and vertical axes, to allow exact positioning even for difficult projections
- Motorized vertical stand height adjustment, with two different speeds plus manual operation for precise positioning
- Optional motorization of the column on the rail for more automation
- Customizable pre-defined positions (move-to-position) and numerous other well-planned features that significantly reduce the physical demands placed on the technologist
- Easy patient positioning with counterbalanced large movement range
- Large and ergonomic patient grips on both left and right sides of the detector for safe and comfortable patient positioning
- Optional rotatable patient stretch grip on top left or right side of the detector
- Convenient user interfaces on both left and right sides of the detector, for quick and easy adjustment of movements, collimation, field alignment and orientation, selection of automatic exposure control chambers and tracking mode
- Wireless remote control providing all commands of the side user interfaces
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector
- Five-field automatic exposure control chamber for optimal image quality and dose, and positioning flexibility especially on the table
- Automatic tube height adjustment to detector or table height (tracking)
- Automatic collimation for X-ray beam limitation to digital flat detector, according to pre-programmed examination parameters
- Optional display on vertical stand column, for patient data in the examination room
- Removable oscillating grid for optimal image quality and dose
- Convenient storage for two grids within the detector unit for immediate and safe storage

The VM vertical stand allows positioning the detector vertically alongside the table to easily perform lateral projections without moving the patient. It can also be placed under the table top, on the side of the table detector. Moving the VM vertical stand to the end of the table, it becomes a digital chest unit. Lowering the detector in horizontal or angulated position, it turns into an ideal extremity examinations device.

In vertical position, the motorized height adjustment from 35 to 185 cm (13.8" to 6' 08") measured at center of detector above the floor, gives a total lift of 150 cm (4' 11.1") to adjust to a comfortable and safe working height with a choice of two different speeds.

The wide size 43 x 43 cm (17 x 17") integrated detector covers all relevant anatomy and offers full diagnostic information. Its Cesium Iodide (CsI) technology provides excellent quantum efficiency (DQE) and helps to reduce the required patient dose.

An integrated five-field automatic exposure control chamber ensures to get optimum image quality at the lowest possible dose even for difficult projections, as well as gives positioning flexibility for various examinations without the need of moving the patient. The removable oscillating grid can easily be put in the convenient and safe storage directly in the detector unit.

Not only can the vertical stand be put in numerous positions to achieve the required projection, but the detector is always locked fixed and precise, greatly simplifying patient positioning work for the technologist, especially for lateral and angulated exposures. In combination with the five-field automatic exposure control chamber, it results in optimal image quality and dose even for difficult projections like axial hips.

Specifications

- VM movable vertical stand
 - Counterbalanced rugged column for motorized and manual movements of the detector
 - Vertical movement range: 35 to 185 cm (13.8" to 6' 08"), measured at center of detector
 - Horizontal movement range: motorized 3.475 m (11' 4.8"), non-motorized 3.71 m (12' 2.1"), with extension rails motorized or non-motorized 5.5 m (18' 0.5")
 - Installation: floor attachment in combination with wall or ceiling attachment
 - Multi-purpose detector arm: swiveling range from 0° to 90° (right or left orientated execution), lock-in positions manual or every 15°
 - Angle of tilt of detector unit: -20° to +90° on horizontal axis (motorized tilting), +45° to -23° on vertical axis (manual tilting)
 - Detector unit size: 59.6x57.5 cm (23.5"x22.6")
 - Automatic exposure control (AEC): 5 AEC measuring fields
 - Operating: 2 user interfaces (left & right) and wireless remote control
 - Removable oscillating grid 40/8/140: 40 lines/cm (100 lines/inch), ratio 8, focus 140 cm (56") for use with source-image distance from 110 to 180 cm (44" to 71")
 - Grid storage: for up to 2 grids within the detector unit
- Detector
 - Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology
 - Active detector area 42.0 x 42.5 cm (16.5 x 16.7")
 - Resolution 8.2 megapixel (2840 x 2874 pixels)
 - Pixel pitch 0.148 mm
 - Pixel depth 16 bits
 - Image resolution: up to 3.4 line pairs per mm

Comprising

- DigitalDiagnost VM vertical stand and sliding rail

- Digital flat detector 43 x 43 cm (17 x 17")
- Default oscillating grid 40/8/140: 40 lines/cm (100 lines/inch), ratio 8, focus 140 cm (56"). A different default grid can be chosen in order questionnaire. Additional grids are available in accessories.
- Software licenses
- Documentation

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Three-phase 80 kW X-ray generator

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Generator featuring modern architecture based on a modular design using high performance components to enable a customer specific solution.

Main benefits at a glance

- Modern architecture based on a modular design using high performance components
- Tube overload protection
- Automatic mains voltage compensation
- Automatic Exposure Control (AEC)
- Fully compatible with VarioFocus (optional)
- Small footprint

The tube overload protection monitors temperature conditions in order to protect tube and housing parts from being damaged or destroyed by overstress. The automatic exposure control sets the exposure time according to exposure voltage and object characteristics in order to automatically obtain the correct exposure.

Specifications

- Computer controlled converter X-ray generator
- Converter generator generates high voltage equivalent to DC voltage
- Nominal power (IEC): 80 kW
- Power: 80 kW
- Three phases, 400 - 480 VAC, 50/60 Hz
- Low or dual speed rotor control, depending on tube
- Max voltage: 150 kV
- Max current (at 80 kV): 1000 mA
- mAs product: 0.5 to 850 mAs
- Exposure time: 1 ms to s
- Maximum mains resistance at 400V: 0.2 Ohm
- Maximum mains current at 400V: 160 A

Comprising

- Generator 80 kW in cabinet

Compatible with

- DigitalDiagnost 3.0 and above
- VarioFocus option
- Philips tube SRO 33100

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**Philips dual-focal high power
SRO 33100 X-ray tube**

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This Philips dual-focal rotating anode high power X-ray tube can be used for all general radiography applications. It is particularly adapted for examinations requiring high power. The anode target angle allows a 43 x 43 cm (17 x 17") X-ray field at minimum source-image distance of 100 cm (39.4").

Main benefits at a glance

- All radiography applications including bariatric
- High load capacity
- Fast speed-up (1 second)
- Fully compatible with Philips VarioFocus option
- Superimposed dual focal spots
- Fast rotating anode (up to 10,800 revolutions per minute)
- Housing with 90° horn angle position with free air convection cooling

To increase continuous power and minimize downtime for more demanding applications, the tube assembly can be equipped with an additional blower.

Specifications

- Two focal spots: 0.6 and 1.2
- Maximum power: 33 kW with focal spot 0.6, 100 kW with focal spot 1.2
- Anode angle: 13°
- Maximum tube voltage: 150 kV
- Anode heat storage capacity: 220 kJ (300 kHU)
- Assembly heat capacity: 1,247 kJ (1,700 kHU)
- Minimum anode speed: between 8,000 and 10,000 revolutions per minute
- Build in filter 2 mm Al (5/64")
- Total filtration minimum: 2.6 mm Al (105/1024")
- Double tube overload protection
- Total weight: 23 kg

Comprising

- Philips X-ray tube SRO 33100
- X-ray housing ROT 360
- Standard clamp fitting
- Two thermal safety switches (tube housing temperature)

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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, wheelchair or weight-bearing feet
- 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 workspace 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, detector protector and hygienic bags) offer easy, safe and quick positioning in the room. 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 becomes low.

The wireless portable detector sharing license gives system use flexibility and optimizes investment costs in the department, allowing to take the wireless portable detector from the system and use it with other compatible Philips DigitalDiagnost, MobileDiagnost wDR 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.

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.

Specifications

- 35 x 43 cm (14 x 17") wireless portable digital flat detector with Cesium Iodide (CsI) technology
- Active detector area 34.1 x 43.2 cm (13.4 x 17")
- Resolution 7.1 megapixel (2372 x 3000 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")
- Wall-mounted docking station
- Battery and backup cable
- Set of 100 hygienic plastic bags
- Software licenses
- Wireless portable detector sharing license
- Documentation

Compatible with

- DigitalDiagnost release 2.1 (no wireless portable detector sharing possible)
- DigitalDiagnost release 3.x and above

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Wide tabletop for BuckyDiagnost TH table

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Completely flat, wide carbon fiber tabletop with plain surface, with convenient aluminum rails on both long sides for fixing accessories.

Specifications

- Type: X-ray transparent floating tabletop
- Material: carbon fiber
- Dimensions: 240 x 85 cm (7' 10.5" x 33.5")
- Tabletop travel: longitudinal ± 60 cm (± 23.6 "), transverse ± 18 cm (± 7.1 ")
- Attenuation equivalent: less or equal to 0.75 mm (0.03") Al at 100 kV

Comprising

- Wide tabletop

- This option replaces the standard 240 x 75 cm (7' 10.5" x 29.5") tabletop

Remark

With DigitalDiagnost, the wide tabletop must be selected to allow the combination with an additional VM vertical stand.

8 ** 2nd controler for TH/TF table 1

This extra controler allows the same controls as the table footswitches (table up and down, release of floating tabletop), even if the footswitches are locked. It can be conveniently clamped anywhere on the tabletop side rails and provides a spiral cable for flexible handling.

Comprising:

- Controler with push buttons, spiral cable and integrated clamp mechanism.

Remark: with the BuckyDiagnost TF table, no motorized height adjustments are possible

9 ** LCD display for VS or VM 1
vertical stand

LCD information display fixed on the side of the vertical stand column, showing patient and examination data.

This convenient display simplifies workflow, permits closer contact to the patient and avoids errors, which is particularly important for a high patient throughput. All vital parameters are directly displayed while positioning the patient. This allows the patient to be addressed personally and enables the technologist to check parameters without frequently walking over to the Eleva acquisition workspot.

An adjustable attachment is used to orientate the display to the best convenience.

For privacy reasons, patient information is automatically removed from the display after the first exposure.

Specifications

- Type: 16.5cm (6.5") adjustable LCD information display
- Data displayed: patient first and last name, date of birth, ID/Accession number, examination name, grid inserted yes/no
- Compatible with VS and VM vertical stands

Comprising

- LCD information display
- Attachment sets for VS and VM vertical stands

10 ** Automatic optimal image 1
resolution

Philips unique VarioFocus generator technology ensures optimal image resolution for all kind of examinations, by avoiding to compromise on which tube focus spot size to use, power load and exposure time.

Main benefits at a glance

- Optimal image quality through mixed focus spot adapted to each examination
- Optimal resolution at the needed power
- Minimum exposure time
- Minimum motion artifacts
- Minimum geometrical blur
- Fully automatic

By using both focus spots simultaneously to define a variable focus spot, Philips VarioFocus automatically balances the power on both focus spots in a defined ratio, ensuring optimal image resolution at any required power. In addition, tube filaments are preserved through power balancing on both focus spots and reduced power load on each of them, which may result in longer tube life.

Comprising

- Software license

Compatible with:

- Philips 50, 65, 80 kW generators
- Philips X-ray tubes RO1750, SRO0951, SRO2550, SRO33100

11 ** Adapt. Transf. 415-480 V 1

Comprising:

- three-phase transformer for mains supply voltage adaptation of 415/440/460/480 V to 400 V and for 380/400 V for mains supply without N (neutral) to be built into the base of generator.

Compatible with:

- Generator OPTIMS 50, 1tube
- second tube connection
- extension to 65 kW
- extension to 80 kW

12 ** 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.

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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

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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
- 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

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mShield

1

Philips mShield is part of an overall strategy to safeguard the data integrity of medical information systems. It protects PCR Eleva from potential malicious software attacks within the hospital network. It decouples the modality from the network and creates a secure environment. By restricting traffic to only authorized devices, mShield acts to prevent malicious activity directed from the modality to unrelated devices on your hospital network. Network communication can be restricted to DICOM communication and remote service only. Thereby channels, which hackers need for attacks or viruses need to spread become unavailable.

The total system uptime can be increased. The cycle time of required security upgrades (patches) can be elongated and synchronized with regularly maintenance activities. No valuable treatment time is lost through system downtime or staff dealing with network problems. Once installed it requires almost no maintenance or update.

Philips mShield is always recommended if the system becomes part of a hospital network.

Philips mShield's design is based on the latest recommendations of International industry standard bodies, such as NEMA, COCIR and JIRA, which recommend firewalls as an "effective and flexible tool" to safeguard the data integrity of medical information systems.

The mShield hardware is designed to fit into a professional medical environment with dedicated robustness against high temperature or high- voltage hazards. It is located between the modality and the department network.

Comprising:

- mShield hardware
- software license and documentation on CD
- dedicated modality rule types

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**Mobile holder for the wireless
portable detector**

1

The wireless detector mobile holder is designed to take full advantage of the wireless portable detector to perform free exposures in optimal conditions.

Main benefits at a glance

- Mounted on wheels for easy moving and positioning in the room
- Holds the wireless portable detector in a safe and precise position
- Very easy to put the detector in and to take it out
- High detector positioning flexibility
- Can hold the wireless portable detector with or without a grid on it
- Brakes on the wheels for fixed and safe positioning
- Also compatible with 35 x 43 cm (14 x 17") CR cassettes

The mobile holder provides outstanding positioning flexibility for the wireless portable detector. Mounted on wheels, it is easily positioned in the room and all around the patient. With or without a grid on it, the wireless portable detector can be held in various positions depending on projection requirements. The positioning is achieved quickly and easily, thanks to very intuitive use and self-locking joints. Featuring a height adjustable arm with swivel, the detector is safely held and can be lifted, tilted, swiveled or rotated to the best convenience.

Specifications

- Dimensions: length 68 cm (26.8"), width 67 cm (26.4"), height 150.7 cm (59.3")
- Vertical movement range of holder arm: 68 to 128 cm (26.8 to 50.4"), center of large portable detector
- Weight: 53.2 kg (117 lbs)

Comprising

- Mobile detector holder

Compatible with

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

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**Protector for the wireless
portable detector**

1

The wireless portable detector protector is designed to be placed over the detector on the floor when performing an anteroposterior view during a weight bearing feet examination, allowing to exam patients up to 227 kg (500 lbs).

Main benefits at a glance

- Allows performing weight bearing feet examinations with patients up to 227 kg (500 lbs)
- Easy positioning over the wireless portable detector on the floor
- Convenient handle for positioning and carrying
- Slim and stable design for secure patient examination
- Also compatible with 35 x 43 cm (14 x 17") CR cassettes

Specifications

- Dimensions: length 53.4 cm (21"), width 51.2 cm (20.2"), height 6.1 cm (2.4")
- Weight: 3.95 kg (8.7 lbs)
- Attenuation equivalent: less than 1.1 mm (0.04") Al at 100 kV
- Maximum patient weight: 227 kg (500 lbs)

Comprising

- Detector protector

Compatible with

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

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**Bed holder for the wireless
portable detector**

1

The wireless detector bed holder is designed to take full advantage of the wireless portable detector to perform free exposures at the patient bed.

Main benefits at a glance

- Slim design for easy positioning at the patient bed, Bucky table or trolley
- Holds the wireless portable detector in a safe and precise position, in portrait or landscape orientation
- Can hold the detector in a tilted position for angulated projections
- Very easy to put the detector in and to take it out
- Can hold the wireless portable detector with or without a grid on it
- Also compatible with 35 x 43 cm (14 x 17") CR cassettes

Specifications

- Dimensions: length 41.5 cm (16.3"), width 23 cm (9.1"), height 72 cm (28.3")
- Weight: 4 kg (8.8 lbs)

Comprising

Compatible with

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

19

Holder to park grids of wireless portable detector

1

Wall mounted holder to safely park the grids of a wireless portable detector when not used. With its robust, painted metal design, it is made to be fixed on the wall in the radiography room for convenient, safe and quick grids handling.

Specifications

- Holds 2 wireless portable detector grids
- Dimensions (approximately): depth 15 cm (5.9"), width 60 cm (23.6"), height 25 cm (9.8")
- Weight (approximately): 4.7 kg (10.3 lbs)

Comprising

- Holder and wall mounting accessories

20

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")

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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")

22

Stretch grip f. wall stands

1

To keep the patient's arm overhead or beside the Bucky unit during exposure.

To be insert at the Bucky unit at right or left side.

Comprising:

- Arm rest, U- shaped for different grip height, tiltable from -90° to +90° for height and side position

- wall holder for parking

Compatible with:

- BuckyDiagnost VS (advanced package)
- BuckyDiagnost VS with digital detector and DigitalDiagnost VM

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Trade in Allowance

1

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

Product: Siemens TOMO
Serial Number: 1205
Manufacturer: SIEMENS MEDICAL SYSTEMS INC

Trade-In authorization number: 34292

De-install Date: Not later than 180 days after receipt of Order

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.

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**XD3605DIGITALDIAGNOSTR2/
R3CTC9**

1

Course Number:
XD3605

System Codes:
712020, 712022, 712025

Course Title:
DigitalDiagnost R2 and R3

Course Length:
9 days (exclude Saturday, Sunday, and Philips holiday)

Delivery Method(s):
Instructor-Led

Modality:
DXR

Location:
PHC, CTC and SLC

Target Audience:
FSE, Dealers and Agents

DESCRIPTION:

This course provides the engineer with sufficient information and a structured insight in the DigitalDiagnost R2 and R3 to service DigitalDiagnost system.
The course includes both release 2 and release 3 systems; including the release 3 components CSIII, bucky unit portable and M cabinet CXA.

Engineers, who already attended a XD3681, XD3682 or XD8102 in the past, should not register for this course since it includes release 2!

PREREQUISITES:

XD3002 or XD3007 Basics of X-Ray
CS9020 Basic networking
CS9027 Basic DICOM
XD9048 DigitalDiagnost rel. 2.1 with wireless portable detector OR XD9081 wireless portable detector
XD9056 Eleva Platform basics

COURSE OBJECTIVES:

After attending this course, the engineer will have knowledge of:

Technical application aspects (hardware and workstation software)
Configurations and product structure
Connectivity aspects
Performance requirements
Safety aspects
Faultfinding

The engineer will learn how to:

Operate the system
Handle test software
Configure the system
Calibrate the system
Check performance
Perform CM at PCB / Unit level