

1

**\*\*NNAH275****Digital Diagnost**

1

## DigitalDiagnost

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
- Reduction in the number of repeat exposures due to the elimination 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
  - Wide 16.5cm (6.5") LCD information display and control buttons

- Collimator
  - Motorized automatic collimation, manual overrule possible, with light field indicator
  - Angle of aperture and rotation:  $2 \times 15^\circ$ ,  $\pm 45^\circ$ , 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: 108 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")**

Set of rails for BuckyDiagnost CS 2/4

Fixed at the ceiling for:

- Longitudinal carriages of BuckyDiagnost CS 2/4,
- Monitor ceiling suspension
- Auxiliary ceiling suspension; length: 4,3 m

Comprising:

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

### **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/m<sup>2</sup>
- 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

## CABINET BOX

Pre-deliverable mounting material.

XR Handover OnSite Educ 28h

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.

2

**\*\*NRDN160**

**Digital TH table with fixed detector**

1

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")
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector
- 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 oscillating 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.

The motorized height adjustment gives a total lift of 40 cm (15.7") to adjust to a comfortable and 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 safety during examination.

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

#### 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  $\pm 60$  cm ( $\pm 23.6$ "), transverse  $\pm 13$  cm ( $\pm 5.1$ ") or  $\pm 18$  cm ( $\pm 7.1$ ") with optional wide tabletop
- Tabletop attenuation equivalent: = 0.75 mm Al (at 100 kV)
- Tabletop edge section: flat locking rails for attaching Philips accessories
- 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
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology, resolution 3,000 x 3,000 pixels, pixel pitch 0.143 mm, pixel depth 14 bits
- Detector horizontal travel range:  $\pm 22.7$  cm ( $\pm 8.9$ ")
- Removable oscillating grid 36/12/110: 36 lines/cm (90 lines/inch), ratio 12, focus 110 cm (44")

#### Comprising

- Digital BuckyDiagnost TH height-adjustable table base and tabletop
- Digital flat detector 43 x 43 cm (17 x 17")
- Oscillating grid 36/12/110: 36 lines/cm (90 lines/inch), ratio 12, focus 110 cm (44")
- Software licenses
- Documentation

grPhilips height-adjustable VS vertical stand 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 is optimal for X-ray departments specializing in thorax examinations. The motorized tilting option extends possible application range to extremities, skeletal examinations, and even under-table examinations using a trolley.

#### Main benefits at a glance

- Vertical stand mounted on the floor, optimal for chest X-ray and all wall Bucky applications
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector
- Motorized height adjustment from 30 to 180 cm (11.8" to 5' 11") with two different speeds plus manual operation for precise positioning
- Customizable pre-defined positions (move-to-position) and numerous other well-planned features significantly reduce the physical demands placed on the technologist
- Easy patient positioning with counterbalanced large vertical 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
- Five-field automatic exposure control chamber for optimal image quality and dose, as well as positioning flexibility
- Automatic tube height adjustment to detector height (tracking)
- Automatic collimation for X-ray beam limitation to digital flat detector, according to pre-programmed examination parameters
- Optional motorized detector tilting (-20° to +90°) to support examination of patients on a stretcher, plus straightforward exams of extremities for seated or standing patients
- 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 motorized height adjustment from 30 to 180 cm (11.8" to 5' 11") 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 optimum image quality at the lowest possible dose even for difficult projections, and provides positioning flexibility for various examinations without moving the patient. The removable oscillating grid can be stored conveniently and safely directly in the detector unit.

#### Specifications

- Counterbalanced rugged column for motorized and manual vertical movement of the detector
- Vertical movement range: 30 to 180 cm (11.8" to 5' 11"), measured at center of detector

- Installation: floor and wall attachment, or floor only (optional)
- Detector unit: 59.6 x 57.5 cm (23.5" x 22.6")
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology, resolution 3,000 x 3,000 pixels, pixel pitch 0.143 mm, pixel depth 14 bits
- Optional tilting: -20° to +90° motorized
- Automatic exposure control (AEC): 5 AEC measuring fields
- Operating: two user interfaces (left and 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 two grids within the detector unit

#### Comprising

- Digital BuckyDiagnost VS vertical stand
- Digital flat detector 43 x 43 cm (17 x 17")
- Oscillating grid 40/8/140: 40 lines/cm (100 lines/inch), ratio 8, focus 140 cm (56")
- Software licenses
- Documentation

#### 4      **\*\*NRDN072      Three-phase 80 kW X-ray generator      1**

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
- Power: 80 kW
- Three phases, 400 - 480 VAC, 50/60 Hz
- Low or dual speed rotor control, depending on tube
- High voltage: 40 to 150 kV
- Tube current: 10 to 1100 mA
- mAs product: 0.5 to 850 mAs
- Exposure time: 1 ms to 6 s



- Maximum tube current:
  - 1100 mA at 70 kV
  - 1000 mA at 80 kV 800 mA at 100 kV
  - 640 mA at 125 kV
  - 533 mA at 150 kV
- Maximum mains resistance at 400V: 0.2 Ohm
- Maximum mains current at 400V: 230 A
- Dimensions H x W x D: 195 x 55 x 52 cm (6' 5" x 21.7" x 20.5")
- Weight: 176 kg (388 lbs)

Comprising

- Generator 80 kW in cabinet

Compatible with

- DigitalDiagnost 3.0 and above
- VarioFocus option
- Philips tubes SRO 0951, SRO 2550 and SRO 33100

## 5 **\*\*NRDN092 Philips dual-focal high power SRO 33100 X-ray tube 1**

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)

## 6      **\*\*NRDN140                      System Motorization                      1**

Additional motorization in combination with the auto-stitching option for fully automatic image acquisition of long leg and spine images.

The additional ceiling suspension motorization allows for major workflow enhancements. In combination with the auto-stitching option long leg and spine images can be acquired fully automatic, including tube rotation and detector movement.

Please, note that the body coverage is depending on achieving an SID of 8.5 ft (2.6m).

This option enables also extended move-to-position functionality and detector alignment for the vertical multi-purpose stand.

The DigitalDiagnost dual detector system with horizontal alignment controls the table detector unit. On user request the unit will be aligned with the tube position.

## 7      **\*\*NRDN146                      Uninterruptable Power Supply                      1**

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

## 8      **\*\*NRDN150                      Wide tabletop for                      1** **BuckyDiagnost TH table**

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  $\pm 60$  cm ( $\pm 23.6$ " ), transverse  $\pm 18$  cm ( $\pm 7.1$ " )
- 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.

### 9      **\*\*NRDN153                  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

### 10      **\*\*NRDN175                  Motor. Tilting f. VS                  1**

**Prerequisite:** BuckyDiagnost VS (advanced package)

Bucky unit motorized tilt able from - 20° via vertical (0°) position to horizontal (+90°) position.

"Move to position" function: motorized movements of image receptor (dead man) or automatically (move to next position -20° / 0° / +90°).

Bucky unit vertical: movement range 30 cm - 180 cm (centre of cassette above floor)

Bucky unit horizontal: movement range 55 cm - 205 cm (front plate above floor)

User interface on both sides of image receptor housing for motorized movements, collimation and 5- field measuring chamber.

#### Compatible with:

- Motorized vertically movement for BuckyDiagnost VS (advanced package)
- Spacer for BuckyDiagnost VS (advanced package)
- BABIX holder for VS
- Stretch grip for BuckyDiagnost VS (advanced package)

**11      \*\*NRDN182      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

**12      \*\*NRDN178      Spacer VS      1**  
**Spacer for BuckyDiagnost VS**

Distance piece between column and Bucky unit / tilting unit; helpful for exposures in seated position.

Compatible with:

- BuckyDiagnost VS

**13      \*\*NRDN191      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

**14      \*\*NRDN199      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

**15      \*\*NRDN221      Extension for the longitudinal rails of CS      1**

This mechanical extension of the longitudinal rails allows extending the longitudinal travel of the ceiling suspension. In combination with the long transverse rails (see questionnaire), this longitudinal rail extension makes possible to cover a large area of the room.

Specifications

- Extension size: 2.7 m (106.3")
- Maximal longitudinal travel with extension: approximately 6 m (19' 8.2")

Comprising

- Set of ceiling suspension extension rails
- Mounting and connection hardware

Compatible with

- BuckyDiagnost ceiling suspension CS2/4
- BuckyDiagnost ceiling suspension CSIII (only available for DigitalDiagnost)

Remark

If necessary, it is also possible to adapt the rails extension length to the exact room requirement by requesting the option "Rails separation CS".

**16      \*\*NRDN220      Second laser for fixed source-image distance      1**

Adjusting quickly and precisely the correct source-image distance for a particular projection is crucial to achieve optimal image quality. That's why this second laser integrated into the ceiling suspension control handle is extremely valuable, providing a simple and visual feedback to the technologist if the source-image distance is correct, without needing to measure this distance manually.

The second laser complements the first one already integrated in the ceiling suspension control handle, making two parallel laser lines visible on the table. Adjusting the tube up & down changes the distance between these lines and the correct source-image distance is achieved when both lines are overlapping and only one line is visible.

Specifications

- Type: Laser beam, red color

Comprising

- Second laser beam integrated in the ceiling suspension control handle

**17      \*\*NRDN250      Automatic Stitching SW      1**

After acquiring a set of images, a composite can be stitched directly on the DiDi acquisition console. The algorithm works fully automatically, so that manual interaction is not necessary. In addition manual adjustments can be made. Furthermore this package will also provide distance and angle measurements.

Comprising:

- Software licence
- X-ray ruler for easy stitching and scale information

Compatible with:

- DigitalDiagnost software release 1.5 and above
- SunBlade workstation, not Ultra 10

**18      \*\*NDCC061      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.

**19      \*\*NDCC221      Clinical QC      1**  
This convenient image statistic tool provides the advanced user with functionality to analyse rejected images regarding operators and rejection reasons. It serves as well for monitoring and analysing general parameters. The data files can be downloaded for further usage or archiving on a standard PC.

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

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

Comprising:

- Software licence

Compatible with:

- PCR Eleva software release 1.0 and above

**20      \*\*NDCC251      Direct access to Philips PACS      1**  
**iSite**  
This feature allows access to an existing iSite PACS of version 3.5 or web distribution product, directly on the Eleva workspot.  
The iSite viewer will be an integrated part of the Eleva workspot user interface, thus improving the department workflow.

Main benefits at a glance

- Check and manipulate images that have been sent to iSite PACS with respect to hanging, labeling, image impression, etc
- Review previous X-ray examinations of a patient
- Review previous multi modality (CT, MR, US, etc.) examinations of a patient without leaving the Eleva workspot

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

Comprising

- Software license for connection to an existing iSite PACS or web distribution product

Compatible with

- DigitalDiagnost 2.0 and above: ONLY with iSite versions 3.5/3.6/4.1
- Essenta DR Compact 1.0 and above: ONLY with iSite versions 3.5/3.6/4.1
- PCR Eleva 1.2: ONLY with iSite versions 3.5/3.6/4.1
- PCR Eleva 1.1: ONLY with iSite version 3.5

**21      \*\*989001001622      Extension Set of Ceiling Rails;      1**  
**2.70 M Length**

Comprising:

- 2 CS rails
- fixing parts
- connectors

**22      \*\*989001084241      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

**23      \*\*989001087431      Patient Support      1**

Accessory to support patients during the acquisition of long leg and spine images with a DigitalDiagnost vertical stand stand.

Comprising:

- patient support for easy and safe positioning of patients

Compatible with:

- DigitalDiagnost V(R)-E/T, VS and VM >= Rel 1.3.1
- The “Automatic stitching” license (MDD 1911) is required to stitch the individual images together. For performing the acquisitions of long leg and spine it's recommended to use a CS4 (depending on the room) to reach the necessary SID of 3 m without any problems.

**24      \*\*989001088951      Set of two X-ray filters to      1**  
**optimize image quality**

This set of two X-ray filters allows to optimize image quality during challenging stitching procedures.

Main benefits at a glance

- Reduce direct X-ray radiation on the detector
- Less ghosting artifacts
- More uniform and better image quality
- Recommended to be put in the skull/shoulder area during whole spine procedures

Specifications

- Each stitching filter is composed of an attenuation plate, a holding bar and a fixation mechanism
- Two adjustable joints allow precise positioning
- Filter is attached on side rails of the patient support for stitching

Comprising

- Two stitching filters

Compatible with

- DigitalDiagnost Patient Support for Stitching reference 9890 010 8743x
- Automatic Image Stitching license (NRDN250) is required to stitch the individual images together

**25      \*\*989001087361      Adj. Straps for Patient Support      1**

The adjustable straps provide extra backing patients standing on the patient support during orthopaedic acquisitions.

Compatibility:

- Compatible with the patient support for orthopaedic acquisitions

**26      \*\*989801299678      Airfare to Cleveland for      1**  
**Biomed Training**

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.

**27      \*\*989801299679      Food Transpt Lodging for      8**  
**Cleveland Biomed Training**

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.

**28      \*\*989801299715      XD3689 Bio DigitalDi R2 and 3      1**  
**CTC8**

Course Number: XD3689

Course Title: *DigitalDiagnost R2 and R3*

Course Length: *8 days*

Delivery Method(s): *Instructor-Led*

Modality: *DXR*

**DESCRIPTION:**

*This course provides the engineer with sufficient information and a structured insight in the DigitalDiagnost R2 and R3.*

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

**PREREQUISITES:**

*Prior to:*

§ *XD3671 BuckyDiagnost Part II (or prior Bucky training)*

§ *XD9034 DigitalDiagnost R2.x part 1*

§ *CS9020 Basic networking*

§ *CS9027 Basic DICOM*

- *XD9048 DigitalDiagnost rel. 2.1 with wireless portable detector*

**COURSE OBJECTIVES:**

*After completing this course, the learner will be able to describe:*

- *Technical application aspects (hardware and workstation software)*
- *Configurations and product structure*
- *Connectivity aspects*
- *Performance requirements*
- *Detector calibration*
- *Faultfinding*

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

<b>29</b>	<b>SP019</b>	<b>Trade in Allowance</b>	<b>1</b>
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: 712050 Digital Diagnost			
Serial Number: 534082			
Manufacturer: PHILIPS HEALTHCARE			

Trade-In authorization number: 26278

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.

## OPTIONS

### 1      **\*\*NRDN148      Wireless Portable Detector      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

The wireless portable detector covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17"). Depending on application, 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, 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.

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

## OPTIONS

- 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 batterie
- 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 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, 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
- Backup cable
- Set of 100 hygienic plastic bags
- Software licenses
- Documentation

Compatible with

- DigitalDiagnost release 2.1 and above

2	**989001088151	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



## OPTIONS

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")

3	**989001088161	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

## OPTIONS

- Detector protector

Compatible with

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

### 4      **\*\*989001088251      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

- Bed holder

Compatible with

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

### 5      **\*\*989001088281      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 110 to 180 cm (44" to 56")

## OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
--------	--------	-------------	-----	------	-------	---------

- 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
- Weight: 1.8 kg (3.9 lbs)

### Comprising

- Attachable, fixed grid

### Compatible with

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

6	<b>**989001088291</b>	<b>Grid WPD 40/8/130 Portrait</b>	<b>1</b>			
		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 110 to 180 cm (44" to 56")
- 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
- Weight: 1.8 kg (3.9 lbs)

### Comprising

**OPTIONS**

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
		<ul style="list-style-type: none"><li>Attachable, fixed grid</li></ul>				
		Compatible with				
		<ul style="list-style-type: none"><li>Wireless portable detector 35 x 43 cm (14 x 17")</li></ul>				