

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 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 workspace 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 workspace
  - Eleva workspace 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.

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### **Digital TH table with tray for WPD**

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")
- 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.

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 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  $\pm 60$  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
- 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:  $\pm 22.7$  cm ( $\pm 8.9$ " )
- 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

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### **Digital VS ext. with tray for wireless detector**

1

Philips 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 the possible application range to extremities, skeletal examinations, and under-table examinations using a trolley.

This vertical stand features a wireless tray to insert an optional wireless portable detector. The detector can be taken out of the tray to perform free exposures in the room.

#### **Main benefits at a glance**

- Vertical stand mounted on the floor, optimal for chest X-ray and all wall Bucky applications
- Wireless tray to place and automatically recharge an optional 35 x 43 cm (14 x17") Philips wireless portable flat detector
- Easy-to-operate tray, allowing the positioning of the wireless portable detector in portrait or landscape orientation
- Depending on room layout requirements, tray can be configured at installation to be opened from left or right side
- 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 that 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, and 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 LCD display on vertical stand column, for patient data in the examination room
- Removable 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.

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 grid can be stored conveniently and safely directly in the detector unit.

When inserted in the tray, an optional wireless portable detector covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17"). The detector battery is automatically recharged when the detector is placed in the tray or in its wall-mounted docking station. The integrated and automatic "click-and-forget" mechanism allows easy and fast detector insertion in the tray. It also holds the detector securely in its position, avoiding the risk of accidental detector drop when opening the tray.

Depending on anatomy, a wireless portable detector can be inserted in portrait or landscape orientation and offers full diagnostic information even with large patients. It is part of the Eleva platform and it defines a new dimension of freedom within the radiography room. 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.

At any time, the wireless portable detector can be taken out of the vertical stand 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

- 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)
- Wireless tray where an optional wireless portable detector can be placed in portrait or landscape orientation
- Battery of a wireless portable detector is automatically recharged when the detector is placed in the wireless tray
- Wireless tray opening can be configured at installation for left or right operation
- "Click-and-forget" mechanism holding the detector securely in the tray
- Detector unit: 59.6 x 57.5 cm (23.5" x 22.6")
- 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 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
- Tray for wireless portable detector
- Default 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

4

### **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
- 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                      1**  
**SRO 33100 X-ray tube**

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 Csl 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 (Csl) 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.

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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### Uninterruptable Power Supply

1

Uninterruptable 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

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### 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

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### **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

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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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### **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

## 101650 Digital Diagnost 3.0

Line #	Part #	Description	Qty	Each	Price
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- DuraDiagnos 1.0 and above
- Essenta DR 1.0 and above
- Essenta DR Compact 1.0 and above
- MobileDiagnost wDR
- EssayUpgrade DR 1.0 and above
- PCR Eleva 1.0 and above

### 11 **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")

### 12 **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

**13                                      Airfare to Cleveland for                                      2**  
**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.

**14                                      Food Transpt Lodging for                                      22**  
**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.

**15                                      XD3605DIGITALDIAGNOSTR2/                                      2**  
**R3CTC9**

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



## **Mobile holder for the wireless portable detector**

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")

## **Grid WPD 40/8/130 Portrait**

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")

# Turnkey Proposal

## Summary

The purpose of this scope of work ("SOW") is to define the extent of the Turnkey engineering, procurement and contracting work required to complete the project described above. Anything not specifically included by mention in this description is excluded from the agreed upon SOW. In the event of a conflict between the work described in the SOW definition set forth below, and the supplemental documents attached to this Turnkey Contracting Proposal, the SOW shall govern. The SOW should be thoroughly reviewed by all involved parties to ensure that all areas of concern are addressed, as the items described therein shall govern execution of the project described herein ("Project"). Additional items not addressed in this proposal may be included in the Project, but are subject to negotiation.

This proposal references **site drawing number**: N-SOU131172

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### **DESIGN:**

NO architectural and engineering work necessary to complete the project described above is included:

- Architectural, Structural or MEP engineered drawings are not included.
- Physicist shielding reports, post-testing is included.
- Asbestos testing and /or removal is not included.
- Any pre-construction meetings are included.
- All necessary construction progress inspections are included.
- Travel costs and all other miscellaneous expenses are included.
- Permits are not included.
- Project Duration approximately 35 Business days.

### **CONSTRUCTION:**

#### **Division 01 – General Requirements**

- Keep a current and up to date copy of the Philips construction documents on the job, marked with red-lines for all changes that occur during the work.
- Provide all necessary samples.
- Maintain a full time job superintendent.
- Provide all overtime labor as required to complete the project within the agreed upon schedule.

- Standard job site work hours are 7:00 AM to 5:00 PM. Permission to work at the site during any periods other than standard work hours must be approved by the facility in advance, in writing.
- Noise restrictions at the job site are as follows: As directed by Facility. No restrictions talked during walk through.
- HEPA filters and infection control procedures as required by the facility. Maintain negative pressure in the construction area as required by the facility.
- Provide for daily broom cleaning of the job site and debris removal and appropriate disposal (not including any Philips equipment containers and packing materials). Use of walk off mats as required by the facility. The entire job site shall be cleaned upon completion of the work, prior to turnover to the customer.
- The storage, staging and delivery of materials to the job site shall be as follows: As directed by Facility.
- Parking for construction workers is restricted to: As directed by Facility.
- Compliance with the Owner's security regulations and dress codes is required.
- Use of the Owners' facilities is limited to: As directed by Facility.

## **Division 02 – Site work**

### **Selective demolition including but not limited to:**

- Open existing sheetrock in selected areas for blocking and new electrical in the exam room and control room.
- Remove acoustical ceiling tile as needed.
- Remove old surface mounted conduits not needed and patch walls.
- Provide dumpster for project trash and placed as directed by facility.
- All items that are intended to be salvaged by the owner will be so noted and removed by the owner prior to the start of the demolition work.
- **This scope of work does not include the removal of any materials deemed hazardous by local authorities, the EPA, OSHA, or any other authority having jurisdiction over the work. If such materials are discovered at any time that the work is proceeding, the work will immediately cease, the owner will be notified, and the work will again proceed after the owner has removed all of the hazardous material from the job site.**

## **Division 03 – Concrete –**

**N/A**

## **Division 04 – Masonry -**

**N/A**

## **Division 05 – Metals**

- Provide blocking in wall for Bucky Stand.
- Existing ceiling Unistrut support system to stay as is.

## **Division 06 – Wood, Plastics and Composites**

- Provide new 6'0" x 2'0" deep millwork counter top in the Control Room.

## **Division 07 – Thermal and Moisture Protection**

- All new wall penetrations shall have the required fire caulk.

**Division 08 – Doors, Windows and Glass –**

**N/A**

**Division 09 – Finishes**

- All existing drywall disturbed by the work shall be patched, repaired and replaced as required with materials and construction type compatible with existing drywall construction.
- Provide new 2x2 vinyl covered ceiling tiles in exam room.
- Provide 4 1/4"x4 1/4" ceramic tile wainscot in exam room. Color to be determined.
- All walls in exam and control room shall be painted to match building standard colors.
- All door and window frames shall be painted to match building standards.
- Provide Armstrong seamless flooring with 4" Flash Cove Base. (Color to be determined)
- The services of a professional interior designer are not included, nor are there any furnishings, furniture, art work, window treatments, miscellaneous accessories, etc.

**Division 10 – Specialties –**

**N/A**

**Division 11 – Equipment -**

**N/A**

**Division 12 – Furnishings –**

**N/A**

**Division 13 – Special Construction**

- Patch wall opening as required in Scan Room with 1/16" lead material up to 7' AFF.
- Install a new 24" x 24" leaded glass window. (Glass only)

**Division 14 – Conveying Equipment –**

**N/A**

**Division 21 – Fire Suppression –**

**N/A**

**Division 22 – Plumbing –**

**N/A**

**Division 23 – Heating Ventilating and Air Conditioning –**

**N/A**

**Division 26 – Electrical**

- Demo existing floor gutter
- Demo existing wall gutter
- Demo existing conduits, j-boxes, etc from old system
- Reuse existing CB
- Reuse existing warning light and tie in controls to new system
- Reuse existing door switch and tie in controls to new system
- Provide and install 5 new j-boxes (CS, DVS, JB, MS, and WD)
- Install new Philips cabinet ME (provided by Philips)
- Provide and install conduit runs #2-3, 6-9, 11-13, and 15-18 (#1 is existing to
- CB, #4 is existing to warning light, #5 is existing to door switch, #10 & #14 are existing to wall stand) as listed on Philips plans dated 6/20/2011



- Replace existing duplex receptacle in control room with quad receptacle
- Extend existing conduit runs #10 & #14 to new DVS j-box
- Connect existing CB to new ME
- Provide and install new 480 volt, 100 amp, 4 wire (3 - #2 AWG hots, 1 - #2 AWG ground) feeder in 2" conduit from CB to new ME
- Connect Philips Generator to 480 volt feed

**Excludes:**

After hours work  
 Providing or installing any low voltage systems devices or back boxes  
 (i.e.Data/phone drops, fire alarm devices, nurse call devices, etc...)

<b>Division 27 – Communications –</b>	<b>N/A</b>
<b>Division 28 – Electronic Safety and Security</b>	<b>N/A</b>
<b>Division 31 – Earthwork –</b>	<b>N/A</b>
<b>Division 32 – Exterior Improvements –</b>	<b>N/A</b>
<b>Division 33 – Utilities –</b>	<b>N/A</b>
<b>Division 34 – Transportation –</b>	<b>N/A</b>

**CLARIFICATIONS:**

Should any of the following issues arise during construction; the contractor will agree to correct the issues after re-negotiating a price with the government.

- Repair of any existing faulty equipment or wiring to remain in use.
- Repair of any unsafe conditions revealed during the course of construction.
- Any unforeseen or latent conditions.

**EXCLUSIONS**

- Overtime
- Code Compliance of existing electrical system.
- Telephone/Data cabling and/or equipment installation.
- Waxing of new floors.
- Nurse call, code blue, intercom, security, CCTV or TV systems.
- Removal of hazardous materials.
- Rigging and/or de-installation of equipment.
- Any Medical gas work.
- Vibration and noise level studies.
- Repairs of code violations not related to the above Scope of work.
- 3<sup>rd</sup> Party Commissioning.
- TDH fees for inspections, review or certifications.
- Not responsible for unforeseen conditions.