

Line #	Part #	Description	Qty	Each	Price
1		<b>Digital Diagnost 3.1</b>	1		
		<b>Digital Diagnost</b>			

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

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

Main benefits at a glance

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

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

The high workflow automation possible through the Eleva concept allows concentrating on patients instead of on the system. The touch screen user interface, the integrated generator controls, and the automatic setting of exposure parameters based on patient and examination information coming from the RIS, provide quick and easy access to all functions a busy

technologist needs to achieve an efficient workflow. In addition, the Eleva alternative workflow concept provides the flexibility to adapt to particular situations and change the planned examination protocol without readjusting any exposure settings.

Thanks to Philips outstanding UNIQUE (UNified Image Quality Enhancement) advanced multi-resolution image processing, images are always displayed fully processed. UNIQUE provides an optimal contrast harmonization with enhanced details, while the overall impression remains natural. When used in combination with Philips integrated CR, it provides a comparable image impression for all CR and DR images.

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

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

## Specifications

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

#### Comprising

- BuckyDiagnost CS III Ceiling suspension
  - Four-part telescopic column
  - X-ray tube assembly with collimator
  - Control handle with buttons and LCD screen
  - Rail system
  - Installation cables and high voltage cables
  - Set of marker for preferred source-image distance
- Eleva workspot
  - Eleva workspot computer, keyboard and mouse, cables
  - Eleva application and examination database software and licenses
  - Windows XP Embedded system software and licenses
  - UNIQUE advanced multi-resolution image processing
  - Dynamic reconstruction image processing software
  - Easy Workflow
  - Shutter and Image Verification tool
  - Antivirus software and license
  - Instruction for use
  - Quick reference guide
  - User documentation

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

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

Comprising:

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

Compatible with:

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

### **Eleva Exam. Control Advanced**

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

Main benefits at a glance

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

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

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

### **Specifications**

- 19" flat panel color TFT LCD display
- Resolution 1280 x 1024 pixels
- Luminance 220 cd/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

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

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

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

#### **Specifications**

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

#### **Comprising**

- UPS device including holder for vertical positioning, power cable

### **Cable Carrier CS**

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

#### **Comprising:**

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

### **CABINET BOX**

Pre-deliverable mounting material.

### **XR Handover OnSite Educ 28h**

#### **Clinical Education Program for Radiography Systems**

Handover OnSite Education: Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include any OffSite education attendees if applicable. CEU credits may be available if the participant meets the guidelines provided by Philips. Depending on your system configuration, the first four (4) hours onsite may be spent configuring new equipment for specific clinical needs, as well as reviewing important safety features and quality procedures. Please read guidelines for more

information. Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

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

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 522-100614

2

**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

- **Table**
  - 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
  - Detector horizontal travel range:  $\pm 22.7$  cm ( $\pm 8.9$ " )
  - Removable oscillating 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")
- **Detector**
  - Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology
  - Active detector area 42.0 x 42.5 cm (16.5 x 16.7")
  - Resolution 8.2 megapixel (2840 x 2874 pixels)
  - Pixel pitch 0.148 mm
  - Pixel depth 16 bits
  - Image resolution: up to 3.4 line pairs per mm

### Comprising

- Digital BuckyDiagnost TH height-adjustable table base and tabletop
- Digital flat detector 43 x 43 cm (17 x 17")
- Default oscillating 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

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 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

- VS vertical stand



- 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")
- 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
- Detector
  - Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology
  - Active detector area 42.0 x 42.5 cm (16.5 x 16.7")
  - Resolution 8.2 megapixel (2840 x 2874 pixels)
  - Pixel pitch 0.148 mm
  - Pixel depth 16 bits
  - Image resolution: up to 3.4 line pairs per mm

#### Comprising

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

4

### **Three-phase 65 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): 65 kW
- Power: 65 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): 812 mA
- mAs product: 0.5 to 850 mAs
- Exposure time: 1 ms to 4 s
- Maximum mains resistance at 400V: 0.2 Ohm
- Maximum mains current at 400V: 134 A

## Comprising

- Generator 65 kW in cabinet

## Compatible with

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

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

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

#### **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

#### **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.

## 8 **2nd controler for TWTF table** 1

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

Comprising:

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

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

## 9 **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)

## 10 **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

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

Comprising:

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

Compatible with:

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

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### **Automatic Image Stitching**

1

The Automatic Image Stitching software is an advanced orthopedic feature to perform long lengths imaging fully automatically.

Main benefits at a glance

- Simple to use for the technologist by only defining the collimation on the patient
- System automatically acquires the number of necessary images based on the defined collimation
- Automatic tube and detector movements during acquisition
- Acquisition of two or three images depending on collimation
- Automatic software stitching images together in one composite image
- Possibility to do stitching procedures with vertical stand but also on the table
- Optional patient stand for better patient positioning
- Single-focus tube rotation to minimize image distortions
- Dedicated orthopedic measurements included

Orthopedic examinations are facilitated by the use of the orthopedic patient stand for patient positioning. After the automatic acquisition of the image set (two to three images according to examination), a composite image is created instantly on the DigitalDiagnost Eleva workspot. The algorithm is fully automatic, rendering manual interaction unnecessary although any manual adjustments can be made. Furthermore, this package also provides Cobb's angle and femoral head difference measurements.

When combined with PCR integration and DigitalDiagnost 2 or above, this software also allows performing automatic image stitching with long view PCR cassettes.

Specifications

- Patient coverage: up to 120 cm (47") with minimum source-image distance 260 cm (102")
- Patient coverage on TH table: up to 90 cm (35.4")
- Number of acquired images: up to 3
- Overlap area between images: 4.5 cm (1.8")
- Stitching software algorithm based on anatomical structures and lead ruler

### Comprising

- Automatic Image Stitching software and license
- Removable stitching oscillating grid:
  - For DigitalDiagnost release 3 and above: grid 40/8/180: 40 lines/cm (100 lines/inch), ratio 8, focus 180 cm (71") for use with source-image distance from 126 to 315 cm (50" to 124")
  - For other DigitalDiagnost versions: grid 36/8/180: 36 lines/cm (90 lines/inch), ratio 8, focus 180 cm (71") for use with source-image distance from 126 to 315 cm (50" to 124")
- Lead ruler
- Stitching Application Guide

### Compatible with

- DigitalDiagnost software release 1.5 and above
- CS Motorization required
- VS and VM vertical stands, not VE or VT. With VM vertical stand, stitching on the TH-S table is only possible in combination with the motorized horizontal movement option (NRDN181)
- TH and TH-S tables
- Patient support for stitching
- Not for systems with 2nd ceiling suspension
- DigitalDiagnost Classic and release 2: compatible with X-ray tubes
  - R01750
  - SR00951
  - SR02550
  - SR033100
- DigitalDiagnost release 3: compatible with High power X-ray tube
  - SR033100

### Remarks

- With VM vertical stand in a single detector configuration, horizontal stitching is only possible with the TH-S table
- With VM vertical stand, stitching on the TH-S table is only possible in combination with the motorized horizontal movement option (NRDN181)
- Ceiling suspension with long transverse rails is recommended to easily reach the necessary source-image distance of 3 m (118")

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.

**14**

### **Clinical Quality Control software**

**1**

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

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

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

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

Comprising

- Software license

Compatible with

- DigitalDiagnost 2.0 and above
- DuraDiagnost 1.0 and above
- Essenta DR 1.0 and above
- Essenta DR Compact 1.0 and above
- MobileDiagnost wDR
- EasyUpgrade DR 1.0 and above
- PCR Eleva 1.0 and above
- ProGrade Rel 1 and above

**15**

### **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  $-90^{\circ}$  to  $+90^{\circ}$  for height and side position

- wall holder for parking

Compatible with:

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

16

### **Stand for easy patient positioning**

1

The patient support is a movable stand recommended to facilitate long length acquisitions like legs and spine stitching procedures with a vertical stand.

Main benefits at a glance

- Makes stitching examinations easy and reliable by having the patient standing comfortable, confident and still
- Comfortable and secure for the patient to stand on, thanks to a wide and stable footplate and large height adjustable handles to hold to
- Easy to step on, thanks to a low height profile step
- Four wheels allow easy placement in front of the vertical stand and storage
- Metal fasteners on the floor to place the wheels in and lockable wheels, for precise, stable and secure placement in front of the vertical stand

Specifications

- Height: 199 cm (78.3")
- Width: 111 cm (43.7")
- Length: 88.1 cm (34.7")
- Weight: 70 kg (154 lbs)
- Maximum patient weight: 225 kg (496 lbs)

Comprising

- Patient support for stitching
- Label for color blind user

Compatible with

- DigitalDiagnost vertical stands VE, VT, VS and VM
- DigitalDiagnost release 1.3.1 and above
- Automatic Image Stitching license (NRDN250) is required to stitch the individual images together
- Ceiling suspension with long transverse rails is recommended to easily reach the necessary source-image distance of at least 3 m (118")

17

### **Set of two X-ray filters to optimize image quality**

1

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 joins 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

- |  |  |          |
|--|--|----------|
| <b>18</b>  | <b>Adj. Straps for Patient Support</b> | <b>1</b> |
| <p>The adjustable straps provide extra backing patients standing on the patient support during orthopaedic acquisitions.</p> |  |          |

Compatibility:

- Compatible with the patient support for orthopaedic acquisitions

- |  |                          |          |
|--|--------------------------|----------|
| <b>19</b>  | <b>Pair of Handgrips</b> | <b>1</b> |
| <p>Accessory with quick set lever stop. Colour: Yellow</p> |                          |          |