



# Create a premium DR room like no other

## **Philips DigitalDiagnost**

Digital radiography solutions specifications (Release 4.1)

# PHILIPS

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# 1 Introduction

Looking for a versatile single detector system or a multi-detector solution? All our motorized premium DR rooms match your investment strategy to your clinical environment. SkyPlates, Philips lightweight wireless portable detectors, and SkyFlow, the grid-like portable chest image contrast technology, allow you to enhance your economic value. By sharing the SkyPlates between compatible Philips DR systems you can push cost efficiency one step further.

## Key advantages

- Align your financial scope and your clinical needs, e.g. with the large SkyPlate detector in a SkyPlate tray
- Enhance exams and have diagnostic confidence with rapid, harmonized digital images and network integration
- Experience smooth workflow in your motorized DR room for more patient focus, while patients benefit from excellent X-ray dose efficiency

### Ceiling suspension CSM

with full 5-axes motorization, the tube can automatically be positioned close to the patient.

### Vertical stand VS

optimized for X-ray departments specializing in thorax examinations.

### SkyPlate tray

with integrated SkyPlate detector, covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17") and provides full diagnostic information, even with large patients.

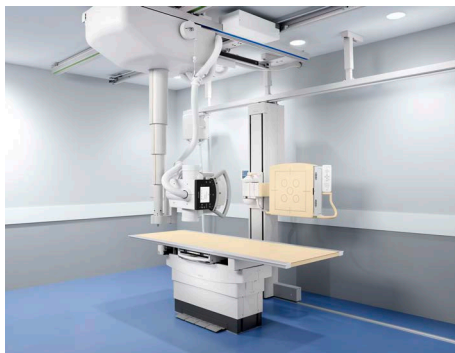
### Digital table TH

with a high weight-bearing capacity, has a proven and smart design that doesn't compromise on robustness, quality and work efficiency, even with challenging patients. The floating tabletop with its wide travel range provides significantly more coverage, allowing quick and effortless positioning.



## 2 Overview of individual room configurations

Experience premium digital radiography productivity, with high performance rooms and flexible rooms right through to an emergency set-up. DigitalDiagnost (Release 4.1) is based on your feedback from more than 6,500 installed DigitalDiagnost systems. Choose the configuration suited to your application needs, workflow and budget.



**High performance room – Alternative 1**  
with moveable vertical stand VM and table TH



**High performance room – Alternative 2**  
with fixed vertical stand VS and table TH



**Flex room**  
with moveable vertical stand VM and table TH-S

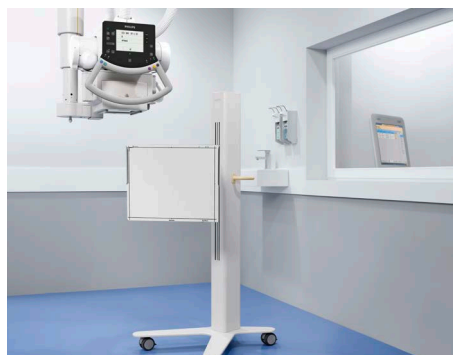


The high performance configuration with vertical stand VM and SkyPlate in the TH table allows for an exceptional variety of applications



#### Value room

with a single SkyPlate moving between fixed vertical stand VS, table TH, or free exposures



#### Emergency room

with ceiling suspension CSM and SkyPlate



#### Chest room

with fixed vertical stand VS

# 3 High performance rooms

## 3.1 Alternative 1

The high performance room configuration with fully motorized ceiling suspension and moveable vertical stand including a fixed 43 cm x 43 cm (17" x 17") detector is especially designed for high patient throughput. You can easily position the detector and tube close to the patient to perform all requested projections without relocating the patient. The configuration with the table-based SkyPlate tray together with the large SkyPlate allows for an exceptional variety of applications.

### Main components

| Hardware                                                                                    |
|---------------------------------------------------------------------------------------------|
| Moveable multi-purpose vertical stand (VM) with swivelling arm and integrated flat detector |
| Digital Bucky table (TH) with integrated SkyPlate or alternatively with fixed detector      |
| Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator    |
| Comfort Track                                                                               |
| Eleva workspot                                                                              |
| Generator (65 kW or 80 kW)                                                                  |
| Software                                                                                    |
| Eleva application and examination database software                                         |
| UNIQUE image processing                                                                     |

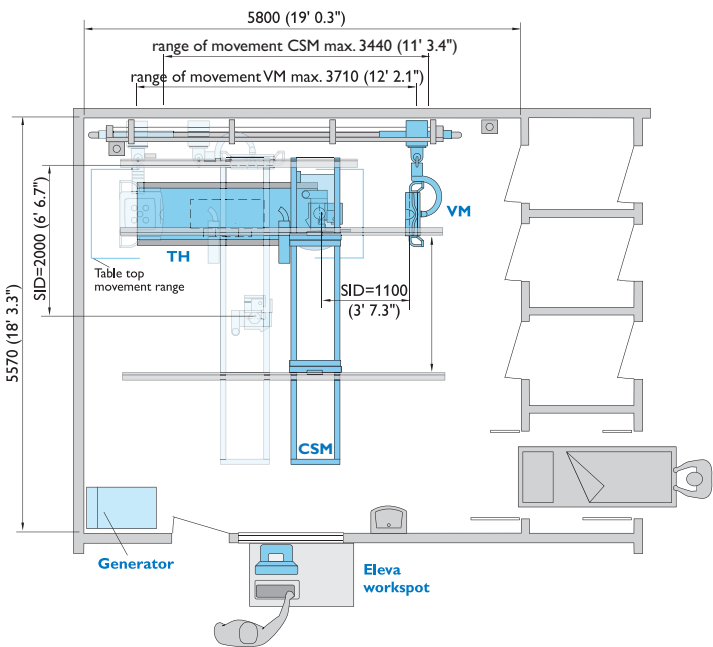
### Optional

| Hardware                                                   |
|------------------------------------------------------------|
| SkyPlate (for configurations with fixed detector in table) |
| Comfort Move                                               |
| Comfort Position                                           |
| Wide table top                                             |
| Vertical stand display                                     |
| PCR reader integration                                     |
| Software                                                   |
| SkyPlate sharing for systems without SkyPlate              |
| SkyFlow                                                    |
| Dose Reporting in DICOM Structured Report format           |
| DICOM package plus                                         |
| DICOM Query/ Retrieve                                      |
| Automatic image stitching                                  |
| Clinical QC                                                |

### Room layouts

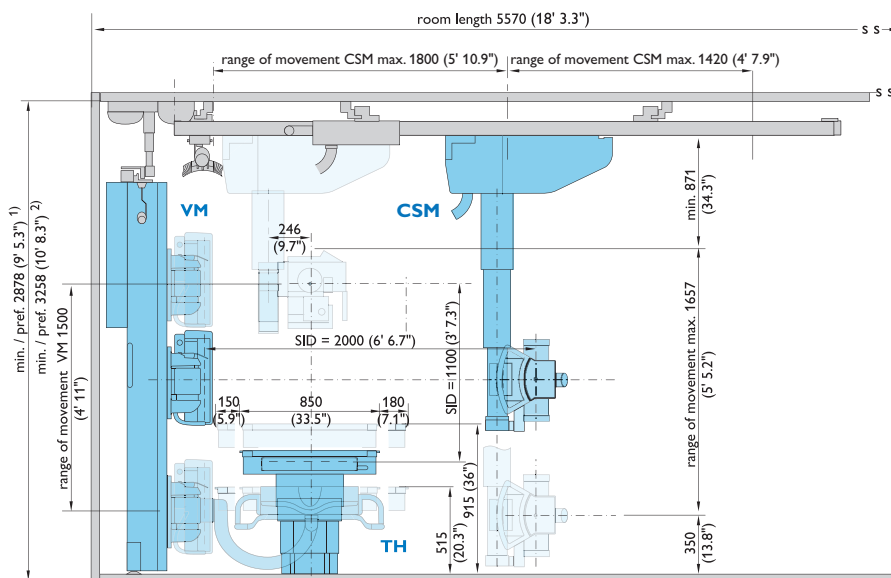
Example room layout based on fixed detector in table TH and moveable vertical stand VM

All dimensions in mm (feet/inches)





Feel the power of the premium DR room with moveable vertical stand



- 1) tubeshield support in upper position
- 2) tubeshield support in lowest position



Perform AP or PA chest exams at the moveable vertical stand VM with patients seated on the table TH



Philips SkyPlate can be positioned in portrait or landscape orientation in the table's SkyPlate tray

3.2 Alternative 2

The high performance room configuration with the fixed vertical stand represents a typical dual detector room configuration. With complete room motorization you can easily and intuitively perform all applications, including automatic image stitching at the vertical stand and on the patient table. A configuration with SkyPlates allows for exceptional application variety.

Main components

| Hardware                                                                                 |
|------------------------------------------------------------------------------------------|
| Digital vertical stand (VS) with fixed detector                                          |
| Digital Bucky table (TH) with integrated SkyPlate or alternatively with fixed detector   |
| Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator |
| Comfort Track                                                                            |
| Eleva workspot                                                                           |
| Generator (65 kW or 80 kW)                                                               |
| Software                                                                                 |
| Eleva application and examination database software                                      |
| UNIQUE image processing                                                                  |

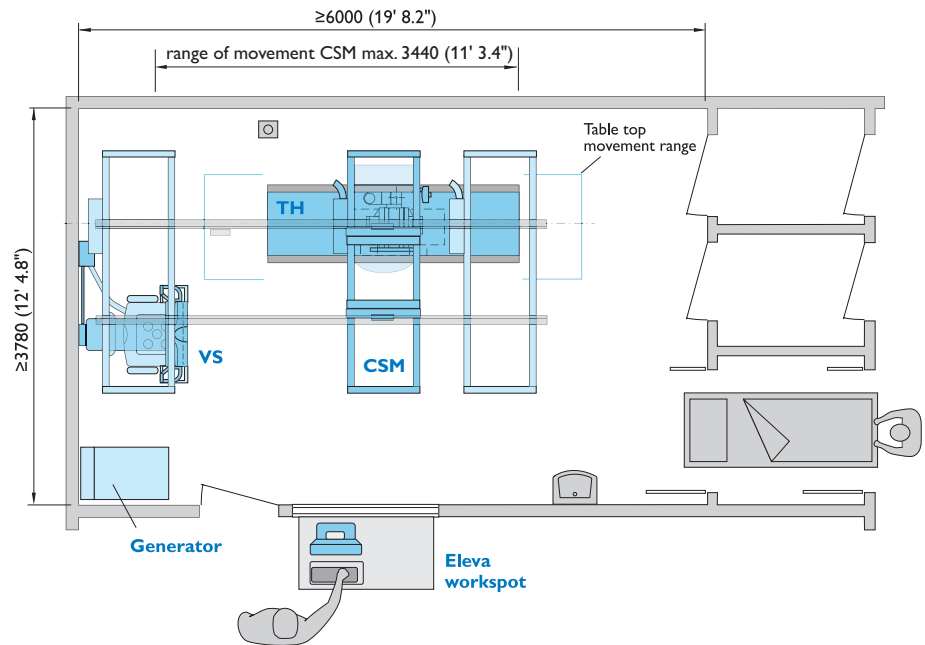
Optional

| Hardware                                                   |
|------------------------------------------------------------|
| SkyPlate (for configurations with fixed detector in table) |
| Comfort Move                                               |
| Comfort Position                                           |
| Wide table top                                             |
| Vertical stand display                                     |
| PCR reader integration                                     |
| Software                                                   |
| SkyPlate sharing for systems without SkyPlate              |
| SkyFlow                                                    |
| Dose Reporting in DICOM Structured Report format           |
| DICOM package plus                                         |
| DICOM Query/ Retrieve                                      |
| Automatic image stitching                                  |
| Clinical QC                                                |

Room layouts

Example room layout based on fixed detector in table TH and vertical stand VS

All dimensions in mm (feet/inches)





## 4 Flex room

The flex room is able to perform all the applications of a traditional two-detector room set-up with one highly flexible fixed detector. You can comfortably position the detector around the patient thanks to the moveable vertical stand. Total room motorization including automated ceiling suspension and the optional swivel table make bedside or wheelchair exams easy. You may also configure the flex room with a SkyPlate for convenient free projections.

### Main components

#### Hardware

Moveable multi-purpose vertical stand (VM) with swivelling arm and integrated flat detector  
 Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator  
 Comfort Track  
 Eleva workspot  
 Generator (65 kW or 80 kW)

#### Software

Eleva application and examination database software  
 UNIQUE image processing

### Optional

#### Hardware

Additional SkyPlate  
 Comfort Move  
 Comfort Position  
 Single side suspended table (TH-S)  
 or alternatively height adjustable trolley (TA-M)  
 Swivel for table (TH-S)  
 Vertical stand display  
 PCR reader integration

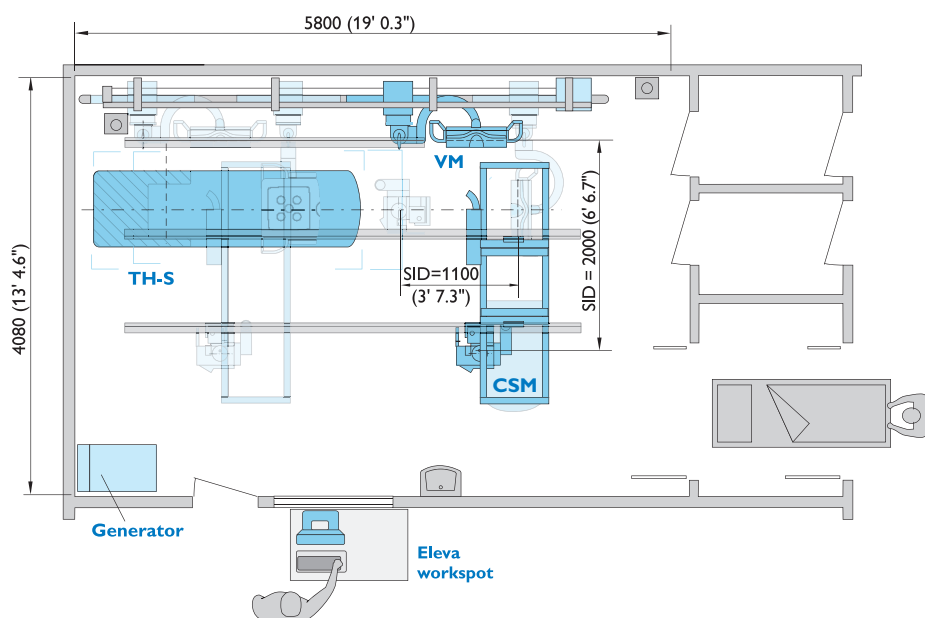
#### Software

SkyPlate sharing for systems without SkyPlate  
 SkyFlow  
 Dose Reporting in DICOM Structured Report format  
 DICOM package plus  
 DICOM Query/ Retrieve  
 Automatic image stitching  
 Clinical QC

### Room layouts

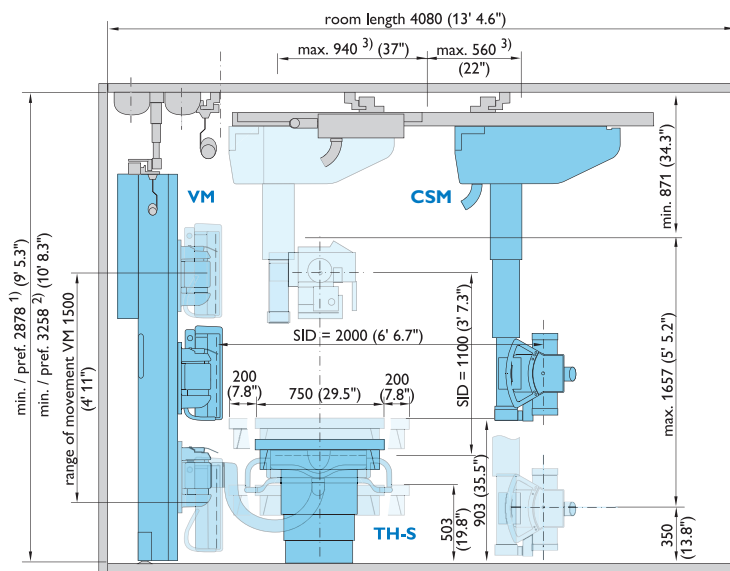
Example room layout based on fixed detector in vertical stand VM and table TH-S

All dimensions in mm (feet/inches)





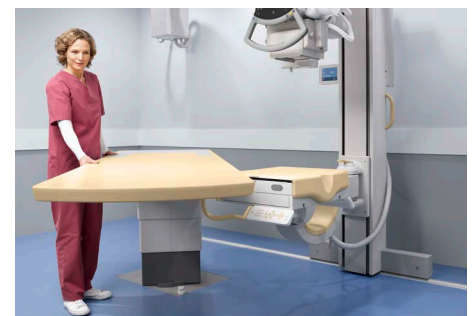
Enhance flexibility with the premium DR room



- 1) tubeshield support in upper position
- 2) tubeshield support in lowest position
- 3) range of movement CSM



Perform stitching exams on the table with the fixed detector in the moveable vertical stand VM



Swiveling table TH-S enables increased system accessibility

## 5 Value room

The completely motorized value room configuration provides a traditional table and vertical stand room set-up, with just one large SkyPlate. You will benefit from excellent economic value because the detector can be used in both the table and vertical stand and supports all DR room applications including automatic image stitching exams. Plus, cost-efficient SkyPlate sharing allows you to use the SkyPlate with other compatible Philips DR systems.

### Main components

#### Hardware

Digital vertical stand (VS) with SkyPlate tray  
 Digital Bucky table (TH) with SkyPlate tray  
 Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator  
 Integrated SkyPlate for table (TH) and vertical stand (VS)  
 Comfort Track  
 Eleva workspot  
 Generator (65 kW or 80 kW)

#### Software

Eleva application and examination database software  
 UNIQUE image processing

### Optional

#### Hardware

Comfort Move  
 Comfort Position  
 Vertical stand display  
 PCR reader integration

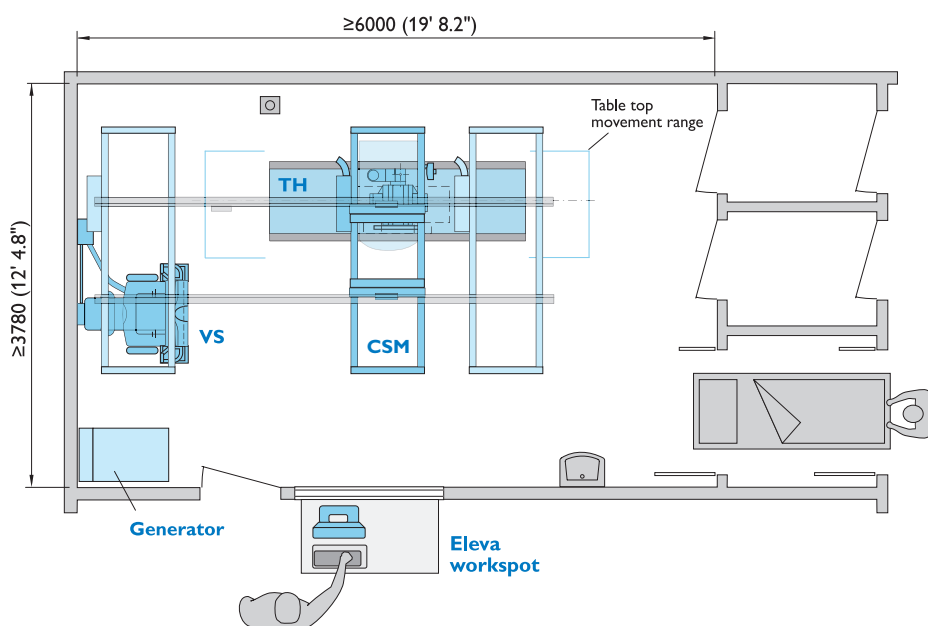
#### Software

SkyPlate sharing for systems without SkyPlate  
 SkyFlow  
 Dose Reporting in DICOM Structured Report format  
 DICOM package plus  
 DICOM Query/ Retrieve  
 Clinical QC

### Room layouts

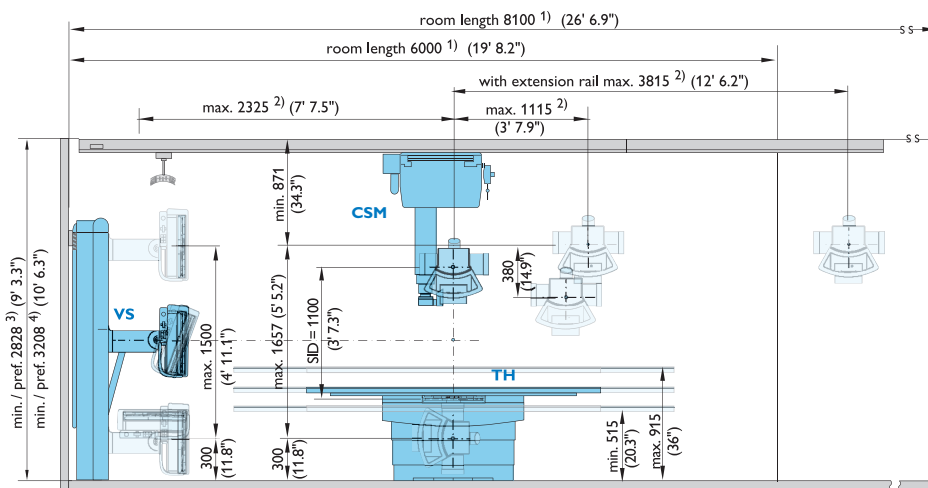
Example room layout with an integrated SkyPlate in table TH and vertical stand VS

All dimensions in mm (feet/inches)

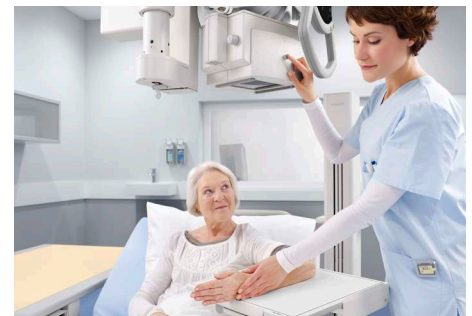




Extend value with the premium DR room



- 1) +300 mm / 11.8" with spacer
- 2) range of movement CSM
- 3) tubeshield support in upper position
- 4) tubeshield support in lower position



Perform free exposures with the SkyPlate and the mobile detector holder



Philips SkyPlate can be positioned in portrait or landscape orientation in the SkyPlate tray

# 6 Emergency room

The emergency room configuration is especially suited to critical work. The slim design of the SkyPlate reduces interference with life support equipment such as tubes and catheters and may result in per-patient time saving. With just a ceiling suspension and the large SkyPlate, there is more room for emergency equipment and staff, and more space around the patient – for example when performing bedside chest exams with the grid-like image contrast software SkyFlow.

### Main components

| Hardware                                                                                 |
|------------------------------------------------------------------------------------------|
| Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator |
| Comfort Track                                                                            |
| SkyPlate                                                                                 |
| Eleva workspot                                                                           |
| Generator (65 kW or 80 kW)                                                               |
| Software                                                                                 |
| Eleva application and examination database software                                      |
| UNIQUE image processing                                                                  |

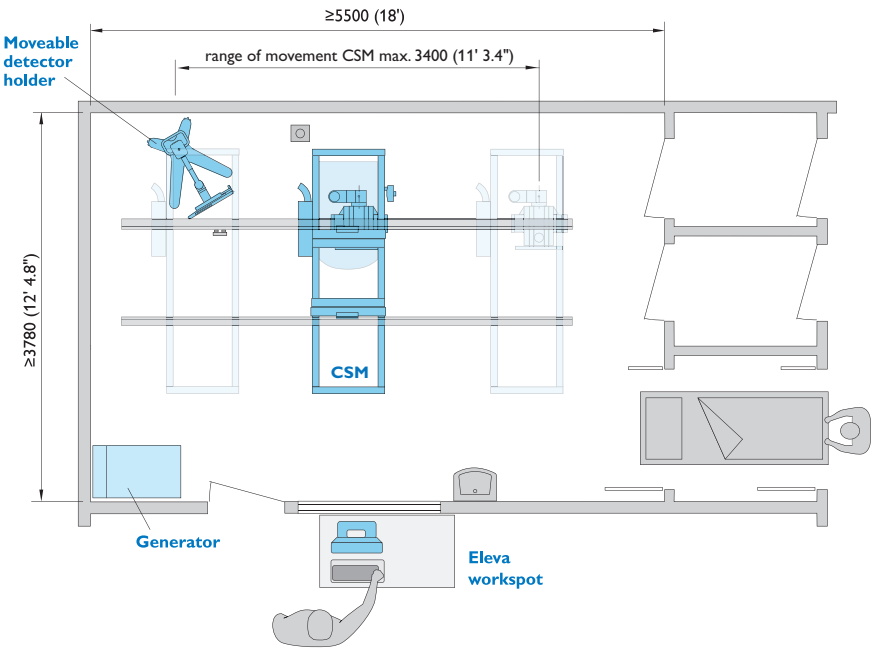
### Optional

| Hardware                                         |
|--------------------------------------------------|
| Vertical stand (VS) with SkyPlate tray           |
| Comfort Move                                     |
| Moveable SkyPlate holder and bed holder          |
| PCR reader integration                           |
| Height adjustable trolley (TA-M)                 |
| Software                                         |
| SkyPlate sharing for systems without SkyPlate    |
| SkyFlow                                          |
| Dose Reporting in DICOM Structured Report format |
| DICOM package plus                               |
| DICOM Query/ Retrieve                            |
| Automatic image stitching                        |
| Clinical QC                                      |

### Room layouts

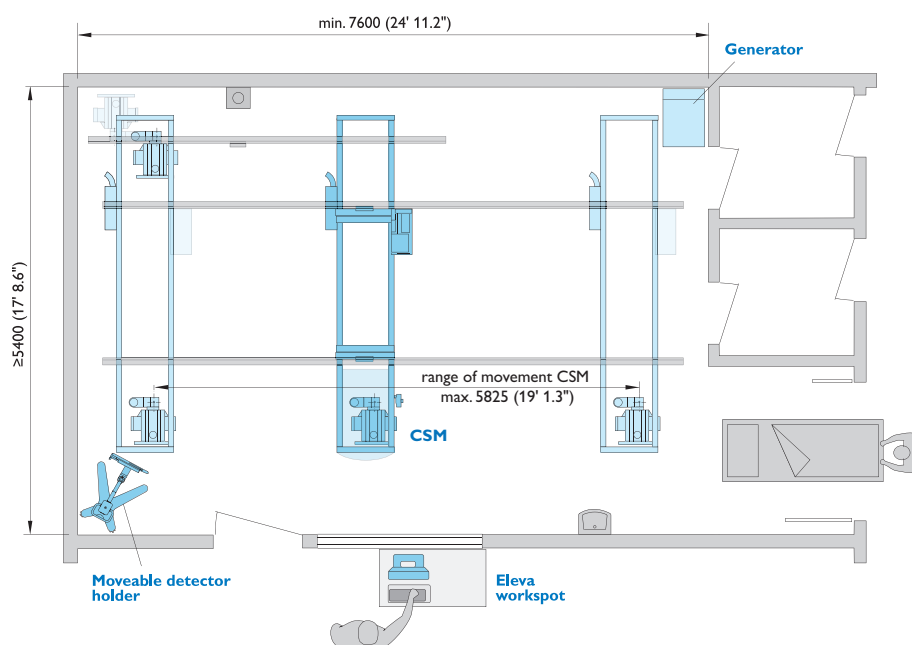
Example room layout with ceiling suspension CSM

All dimensions in mm (feet/inches)

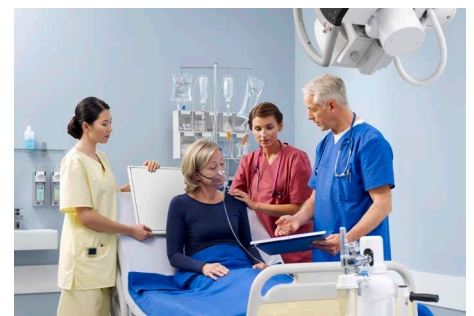




The premium DR room for emergency care



Operate freely and deliver fast care to critical patients



Perform free exposures such as a AP chest exam with the SkyPlate

## 7 Chest room

The chest room allows for high throughput chest exams with excellent image quality. It supports all common exams, including automatic image stitching, using a vertical stand and a motorized ceiling suspension. The optional SkyPlate provides free exposures, for example chest exams in a wheelchair or patient bed with SkyFlow processing which produces grid-like image contrast.

### Main components

#### Hardware

Digital vertical stand (VS) with fixed detector or alternatively integrated SkyPlate  
Motorized ceiling suspension (CSM) with X-ray tube assembly, control grip and collimator  
Comfort Track  
Eleva workspot  
Generator (65 kW or 80 kW)

#### Software

Eleva application and examination database software  
UNIQUE image processing

### Optional

#### Hardware

Additional SkyPlate  
Comfort Move  
Height adjustable trolley (TA-M)  
Vertical stand display  
PCR reader integration

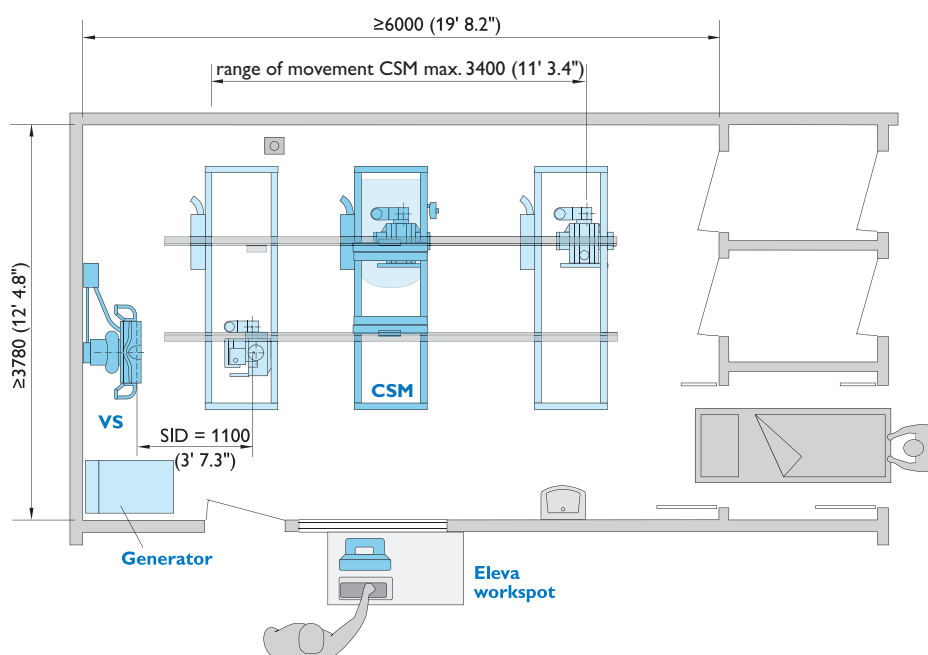
#### Software

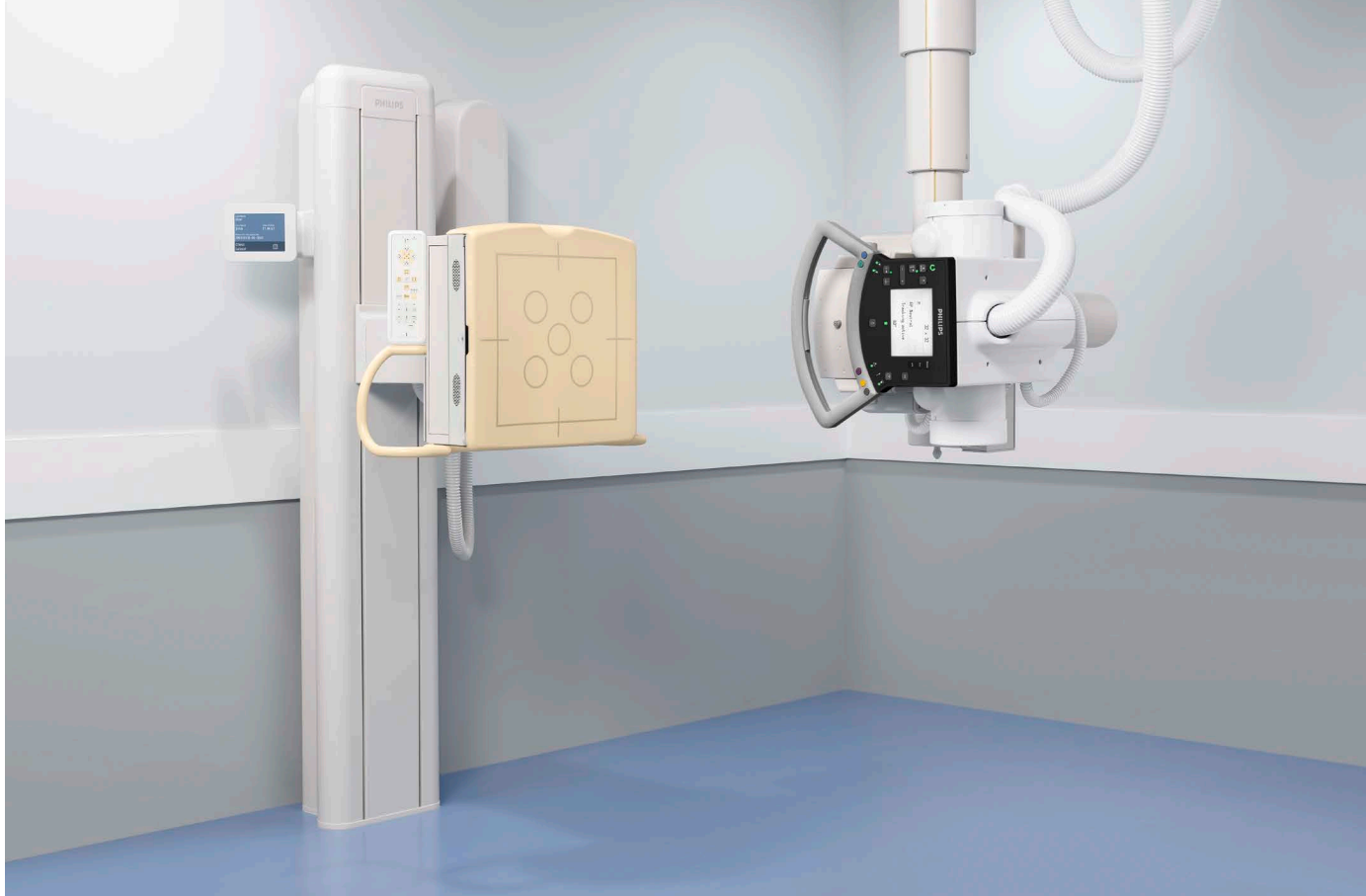
SkyPlate sharing for systems without SkyPlate  
SkyFlow  
Dose Reporting in DICOM Structured Report format  
DICOM package plus  
DICOM Query/ Retrieve  
Automatic image stitching  
Clinical QC

### Room layouts

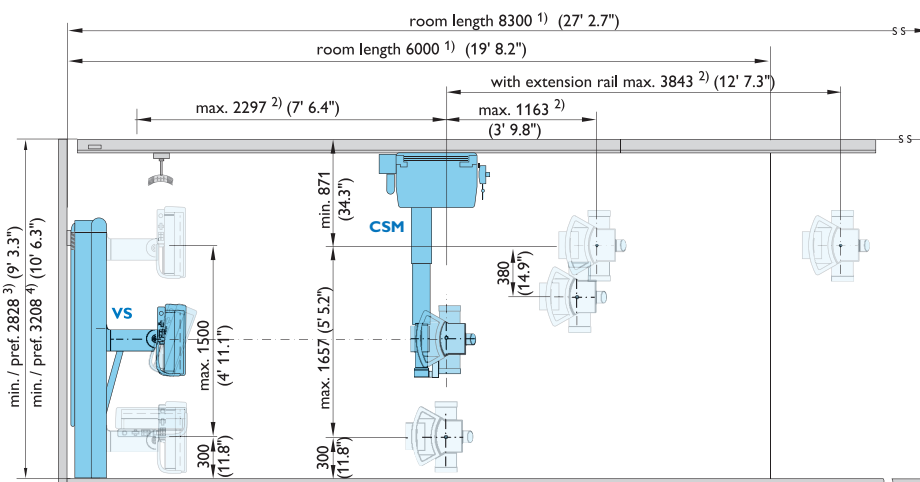
Example room layout with fixed detector in vertical stand VS

All dimensions in mm (feet/inches)

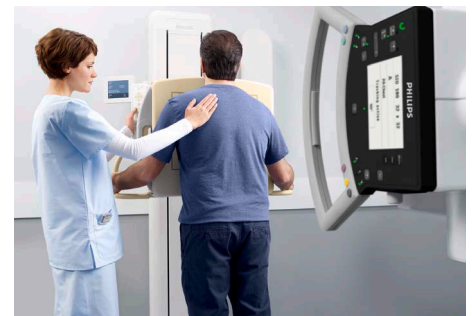




The premium DR room dedicated to chest



- 1) +300 mm / 11.8" with spacer
- 2) range of movement CSM
- 3) tubeshield support in upper position
- 4) tubeshield support in lower position



High degree of efficiency at the fixed vertical stand VS due to its smart and ergonomic design



Tube tracking at the fixed vertical stand VS

## 8 Eleva workspot

Eleva is the easy-to-learn common platform for various Philips DR solutions that makes workflow continuity and network communication simple. It provides a clear and intuitive touch screen and includes the Eleva Workflow Plus and Eleva Review Plus packages – smart tools designed to streamline your daily routine.

| Eleva workspot computer                  |                                                                                                                                                                                                                                                                                                               |                 |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Processor                                | Intel® Core™ i5-2400 Processor (6M Cache, up to 3.40 GHz) or better                                                                                                                                                                                                                                           |                 |
| Hard disk                                | 250 GB SATA (12 GB used for application software and operating system)                                                                                                                                                                                                                                        |                 |
| Image storage                            | 200 GB typically used for 4,000 images                                                                                                                                                                                                                                                                        |                 |
| RAM storage capacity                     | min. 8 GB                                                                                                                                                                                                                                                                                                     |                 |
| Interfaces                               | <ul style="list-style-type: none"> <li>• 10/100/1000 Base-T Gigabit Ethernet</li> <li>• Geometry interface</li> <li>• Detector interface</li> <li>• Memory stick support for quality control</li> </ul>                                                                                                       |                 |
| CD drive                                 | 48x CD/DVD reader/writer                                                                                                                                                                                                                                                                                      |                 |
| Monitor                                  | <ul style="list-style-type: none"> <li>• 19" LCD color touch screen monitor with 1,280 x 1,024 resolution qualified for 2nd reading</li> <li>• Display according to DICOM Grayscale Standard Display Function (GSDF)</li> <li>• Contrast 500:1 max.</li> <li>• Brightness &gt; 200cd/m<sup>2</sup></li> </ul> |                 |
| Keyboard with mouse and function buttons | For entering administrative patient data and for operating the screen menus                                                                                                                                                                                                                                   |                 |
| Integrated generator control             | EPx programmed                                                                                                                                                                                                                                                                                                |                 |
| <b>Image display times</b>               | <b>Fixed detector</b>                                                                                                                                                                                                                                                                                         | <b>SkyPlate</b> |
| Typical time to preview image            | 4 seconds                                                                                                                                                                                                                                                                                                     | 5 seconds       |
| Additional time to full image            | 2 seconds                                                                                                                                                                                                                                                                                                     | 7 seconds       |
| Typical image cycle time                 | 6 seconds                                                                                                                                                                                                                                                                                                     | 12 seconds      |

### Image data

|              |                   |
|--------------|-------------------|
| Data volume  | Up to 18 MB/image |
| Matrix depth | 16 bit/pixel      |

### Optional

#### Barcode reader

Error free input of patient data and patient selection

#### DICOM

Dose Reporting in DICOM Structured Report format  
DICOM package plus

The complete DICOM package plus includes:

- DICOM WLM (Work List Management) and Classic RIS
- DICOM MPPS (Modality Performed Procedure Step)
- DICOM Print
- DICOM Image Export incl. Storage Commit
- DICOM media on CD-R
- DICOM Query/ Retrieve



Premium Eleva touch exam control

## 9 X-ray generation

Philips' dual-focus rotating anode X-ray tubes provide excellent performance over a long lifetime. Philips range of generators are designed with high performance components that can be customized to meet users' needs.

| Generator                      | 65 kW                                                                   | 80 kW                    |
|--------------------------------|-------------------------------------------------------------------------|--------------------------|
| High-voltage generator         | The converter generator generates high voltage equivalent to DC voltage |                          |
| Mains voltage                  | 400 V / 480 V ( $\pm 10\%$ ); 50 Hz or 60 Hz, 3-phase                   |                          |
| Max. mains resistance at 400 V | 0.2 Ohm                                                                 | 0.2 Ohm                  |
| Max. mains current at 400 V    | 134 A                                                                   | 160 A                    |
| Nominal power (IEC)            | 65 kW                                                                   | 80 kW                    |
| Max. tube voltage              | 150 kV                                                                  | 150 kV                   |
| Max. tube current (at 80 kV)   | 812 mA                                                                  | 1000 mA                  |
| Tube support                   | SRO see tube section                                                    | SRO see tube section     |
| mAs product                    | 0.5 mAs to 850 mAs                                                      | 0.5 mAs to 850 mAs       |
| Exposure times                 | 1ms to 4s                                                               | 1ms to 4s                |
| Compatible with VarioFocus     | yes                                                                     | yes                      |
| Safety                         | Tube overload protection                                                | Tube overload protection |

| Tube                            | High power X-ray tube (SRO 33100)  |
|---------------------------------|------------------------------------|
| Two focal spots                 | 0.6 and 1.2                        |
| Maximum power                   |                                    |
| with focal spot 0.6             | 33 kW                              |
| with focal spot 1.2             | 100 kW                             |
| Anode angle                     | 13°                                |
| Maximum tube voltage            | 150 kV                             |
| Anode heat storage capacity     | 220 kJ (300 kHU)                   |
| Assembly heat capacity          | 1.700 kJ (2.315 kHU)               |
| Continuous anode input power    | 190 W                              |
| Minimum anode speed             | 8,000 to 10,000 revolutions/minute |
| Build in filter                 | 2 mm Al (5/64")                    |
| Total filtration minimum        | 2.6 mm Al (105/1024")              |
| Compatible with VarioFocus      | yes                                |
| Double tube overload protection | yes                                |
| Total weight                    | 23 kg                              |



Premium Eleva touch screen with integrated generator control



High power X-ray tube

# 10 Detectors

Philips digital fixed detectors and the SkyPlates feature superb image quality at a low X-ray dose with high DQE and excellent MTF. You can benefit from extended configuration and budget flexibility thanks to table and vertical stand trays for the large SkyPlate and the option to share both SkyPlate sizes across compatible Philips DR systems.

## 10.1 Fixed detector

|                    |                                           |         |
|--------------------|-------------------------------------------|---------|
| Type               | Digital CsI (Cesium Iodide) flat detector |         |
| Detector size      | 43 cm x 43 cm (17" x 17")                 |         |
| Active area        | 42 cm x 42.5 cm (16.5" x 16.7")           |         |
| Image matrix size  | 2,840 pixel x 2,874 pixel                 |         |
| Detector pixels    | 8.2 Megapixel                             |         |
| Pixel size         | 148 µm                                    |         |
| Image resolution   | up to 3.4 Lp/mm                           |         |
| DQE and MTF values | DQE (%)                                   | MTF (%) |
| at 1 µGy           |                                           |         |
| 0.05 Lp/mm         | 65                                        | 98,5    |
| 1.0 Lp/mm          | 51                                        | 64      |
| 2.0 Lp/mm          | 42                                        | 32      |
| 3.0 Lp/mm          | 25                                        | 17      |



Table TH with fixed detector

## Grids

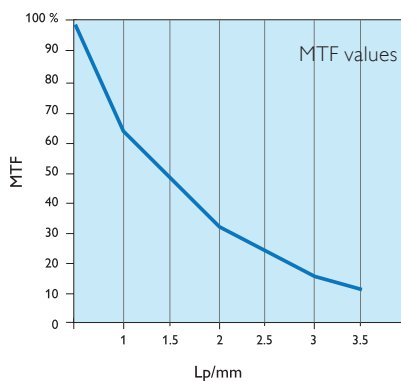
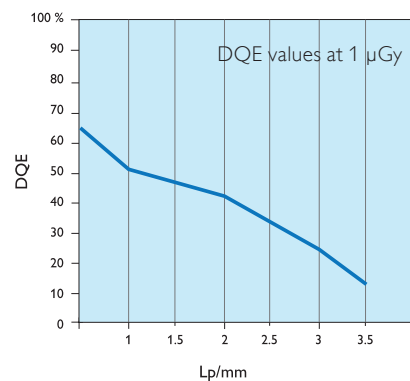
|        |                                                                                                     |
|--------|-----------------------------------------------------------------------------------------------------|
| Type   | Removable carbon fiber grids for fixed detector and for SkyPlate tray, 40 lines/cm (100 lines/inch) |
| Weight | 1.7 kg (3.7 lbs)                                                                                    |

## Specification

| Color Code | Ratio (r) | SID (fo)     | SID range                  |
|------------|-----------|--------------|----------------------------|
| Purple     | 8         | 110 cm (44") | 90 to 142 cm (35 to 56")   |
| Yellow     | 8         | 140 cm (55") | 109 to 197 cm (43 to 77")  |
| Dark blue  | 8         | 180 cm (71") | 131 to 286 cm (52 to 112") |
| Red        | 12        | 110 cm (44") | 96 to 130 cm (38 to 51")   |
| Light blue | 12        | 140 cm (55") | 118 to 173 cm (46 to 68")  |
| Green      | 12        | 180 cm (71") | 144 to 239 cm (57 to 94")  |

## Typical DQE and MTF of Pixium 4343RC

RQA 5 – according to IEC62220-1-1

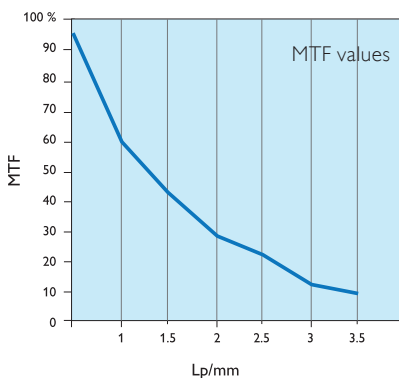
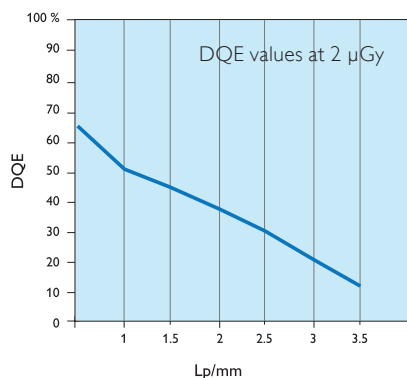


## 10.2 SkyPlate detector family

|                                  | Small                                                                                                                                   | Large                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Type                             | Digital CsI (Cesium Iodide) flat detector                                                                                               | Digital CsI (Cesium Iodide) flat detector |
| Housing material                 | Carbon fiber                                                                                                                            | Carbon fiber                              |
| Sensor protection material       | Carbon fiber                                                                                                                            | Carbon fiber                              |
| Detector size                    | 24 cm x 30 cm (approx. 10" x 12")                                                                                                       | 35 cm x 43 cm (14" x 17")                 |
| Active area                      | 22.2 cm x 28.4 cm (8.7" x 11.2")                                                                                                        | 34.48 cm x 42.12 cm (13.6" x 16.6")       |
| Image matrix size                | 1500 x 1920 pixel                                                                                                                       | 2330 x 2846 pixel                         |
| Dimensions according to ISO 4090 |                                                                                                                                         |                                           |
| Min                              | 266.5 mm x 326.5 mm (10.5" x 12.9")                                                                                                     | 382.5 mm x 458.5 mm (15.1" x 18.1")       |
| Target                           | 267.5 mm x 327.5 mm (10.5" x 12.9")                                                                                                     | 383.5 mm x 459.5 mm (15.1" x 18.1")       |
| Max                              | 268.5 mm x 328.5 mm (10.5" x 12.9")                                                                                                     | 384.5 mm x 460.5 mm (15.1" x 18.1")       |
| Thickness                        | 15 mm (0.59")                                                                                                                           | 15 mm (0.59")                             |
| Thickness Tolerance              | +1 mm/ -2 mm (+0.04"/ -0.08")                                                                                                           | +1 mm/ -2 mm (+0.04"/ -0.08")             |
| Detector pixels                  | 2.9 Megapixel                                                                                                                           | 6.6 Megapixel                             |
| Pixel size                       | 148 µm                                                                                                                                  | 148 µm                                    |
| Image resolution                 | up to 3.38 Lp/mm                                                                                                                        | up to 3.38 Lp/mm                          |
| DQE and MTF values at 2 µGy      | DQE (%)      MTF (%)                                                                                                                    | DQE (%)      MTF (%)                      |
| 0.05 Lp/mm                       | 66              98,5                                                                                                                    | 66              98,5                      |
| 1.0 Lp/mm                        | 50              61                                                                                                                      | 50              61                        |
| 2.0 Lp/mm                        | 40              30                                                                                                                      | 40              30                        |
| 3.0 Lp/mm                        | 24              15                                                                                                                      | 24              15                        |
| Energy range (kVp)               | 40 – 150                                                                                                                                | 40 – 150                                  |
| A/D Conversion (bits)            | 16                                                                                                                                      | 16                                        |
| Weight (incl battery)            | 1.6 kg (3.5 lbs)                                                                                                                        | 2.8 kg (6.2 lbs)                          |
| Max. patient weight              | 100 kg (220 lbs) on 4 cm disk for weight bearing examinations<br>135 kg (298 lbs) for distributed load, e. g. chest examinations in bed |                                           |
| WLAN network standard            | WiFi standard IEEE 802.11 a, b, g or n (configurable)                                                                                   |                                           |
| Encryption                       | Default WPA2 encryption according to IEE 802.11i                                                                                        |                                           |

### Typical DQE and MTF of SkyPlates

RQA 5 - according to IEC62220-1-1



### General environmental conditions

|                         |                     |
|-------------------------|---------------------|
| Temperature range       | 18C to 35C          |
| Relative humidity range | 20% to 75%          |
| Ambient pressure range  | 700 hPA to 1060 hPA |

### Environmental conditions for incubator use

|                      |         |
|----------------------|---------|
| Maximum temperature  | 40C     |
| Relative humidity    | Max 80% |
| Oxygen enrichment O2 | 20-100% |

## Battery

|                                                |                                                  |
|------------------------------------------------|--------------------------------------------------|
| Technology                                     | Exchangeable lithium ion battery                 |
| Size                                           | 64 mm x 248 mm x 71 mm (2.5" x 9.8" x 2.8")      |
| Battery charging time                          | 4 hours max. for 100% charge                     |
| Bar charge status color indication per battery | 0-25%; 25-50%; 50-75%, 75-100                    |
| Autonomy operation mode                        | 3.5 hours/525 images; one image every 20 seconds |
| Autonomy listen mode                           | 6 hours without image acquisition                |
| Charging slots                                 | 3                                                |
| User-replaceable battery                       | (no tools required)                              |

## Click-on carbon fiber grids for portable use

| Type*/Orientation                                               | Ratio (r) | SID (fo)            | SID range                     | Weight            | Dimensions                                           | Comments             |
|-----------------------------------------------------------------|-----------|---------------------|-------------------------------|-------------------|------------------------------------------------------|----------------------|
| Large SkyPlate<br>portrait,<br>44 lines/cm<br>(112 lines/inch)  | 8         | 130 cm<br>(51 inch) | 96 to 203<br>(38 to 80 inch)  | 1.9 kg (4.2 lbs)  | 46.8 x 47.6 x<br>2.5 cm<br>(18.4 x 18.8 x<br>1 inch) | Includes a<br>handle |
| Large SkyPlate<br>landscape,<br>40 lines/cm<br>(100 lines/inch) | 8         | 130 cm<br>(51 inch) | 100 to 185<br>(39 to 73 inch) | 1.9 kg (4.2 lbs)  | 46.8 x 47.6 x<br>2.5 cm<br>(18.4 x 18.8 x<br>1 inch) | Includes a<br>handle |
| Small SkyPlate<br>portrait,<br>40 lines/cm<br>(100 lines/inch)  | 8         | 130 cm<br>(51 inch) | 84 to 291<br>(33 to 115 inch) | 0.95 kg (2.1 lbs) | 35.4 x 28 x<br>2.5 cm<br>(13.9 x 11 x<br>1 inch)     | No handle            |

\* For use in SkyPlate tray please refer to grids listed on page 20

### Optional

- SkyPlate sharing for systems without SkyPlate
- SkyPlate cable 7m (23') and holder
- Handle frame for large SkyPlate – Weight 1 kg (2.2 lbs)
- SkyPlate protector
- Movable and bed holder
- Detector and grid storage
- Add. batteries
- Add. battery charger
- Accident protection program



SkyPlates



# 11 Tables

Philips height adjustable digital tables are an integral part of Philips total room motorization approach. The automated movements, along with those of the ceiling suspended tube, provide comfortable positioning even for challenging patients. The single-side suspended table opens up flexible perspectives for single-detector rooms, for example allowing you to perform trolley and wheelchair exams.

## 11.1 Digital table TH

| Table base                                                                               |                                                                                                                                                                                                                                                                                                   |                                                    |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Height adjustment                                                                        | <ul style="list-style-type: none"><li>• 51.5 cm to 91.5 cm (20.3" to 36") above floor, motorized adjustment</li><li>• Preferred height 75 cm (29.5")</li><li>• Electronic physical protection system with motor shutdown for downward movement; upward movement is possible at any time</li></ul> |                                                    |
| Table weight                                                                             | 335 kg (738 lbs)                                                                                                                                                                                                                                                                                  |                                                    |
| Patient weight                                                                           |                                                                                                                                                                                                                                                                                                   |                                                    |
| Static load center                                                                       | 375 kg (820 lbs)                                                                                                                                                                                                                                                                                  |                                                    |
| Dynamic load center                                                                      | 318 kg (700 lbs)                                                                                                                                                                                                                                                                                  |                                                    |
| Dynamic load off center                                                                  | 210 kg (460 lbs)                                                                                                                                                                                                                                                                                  |                                                    |
| Table top                                                                                |                                                                                                                                                                                                                                                                                                   |                                                    |
| Type                                                                                     | Floating table top of sandwich design with Getalit overlay                                                                                                                                                                                                                                        |                                                    |
| Dimension (l x w)                                                                        | 240 cm x 75 cm (7' 10.5" x 29.5")                                                                                                                                                                                                                                                                 |                                                    |
| Table top travel                                                                         |                                                                                                                                                                                                                                                                                                   |                                                    |
| longitudinal                                                                             | ±60 cm (±23.6")                                                                                                                                                                                                                                                                                   |                                                    |
| transverse                                                                               | ±13 cm (±5.1"), electromagnetic brakes                                                                                                                                                                                                                                                            |                                                    |
| Attenuation equivalent                                                                   | ≤0.75 mm Al equivalent at 100 kV                                                                                                                                                                                                                                                                  |                                                    |
| Table-edge section                                                                       | Flat locking rails for attaching Philips accessories, e.g. infusion bottle holder                                                                                                                                                                                                                 |                                                    |
| Patient coverage                                                                         | Longitudinal                                                                                                                                                                                                                                                                                      | Transversal<br>(standard tabletop / wide tabletop) |
| With fixed detector                                                                      | 200 cm (78.8")                                                                                                                                                                                                                                                                                    | 60 cm (23.6") / 70 cm (27.6")                      |
| With SkyPlate                                                                            |                                                                                                                                                                                                                                                                                                   |                                                    |
| in portrait orientation (patient view)                                                   | 200 cm (78.8")                                                                                                                                                                                                                                                                                    | 60 cm (23.6") / 70 cm (27.6")                      |
| in landscape orientation (patient view)                                                  | 194 cm (76.4")                                                                                                                                                                                                                                                                                    | 60 cm (23.6") / 70 cm (27.6")                      |
| Footswitches                                                                             |                                                                                                                                                                                                                                                                                                   |                                                    |
| Functions                                                                                | <ul style="list-style-type: none"><li>• Table height adjustment down / up</li><li>• Disengage table top brakes in longitudinal and transverse directions</li><li>• Switch on cross light in the collimator (all footswitches)</li><li>• Footswitch interlock</li></ul>                            |                                                    |
| Detectors                                                                                |                                                                                                                                                                                                                                                                                                   |                                                    |
| Fixed detector 43 cm x 43 cm (17" x 17") or removable SkyPlate 35 cm x 43 cm (14" x 17") |                                                                                                                                                                                                                                                                                                   |                                                    |

### Optional

| Wide table top    |                                   | Second table control |                                                                            |
|-------------------|-----------------------------------|----------------------|----------------------------------------------------------------------------|
| Dimension (l x w) | 240 cm x 85 cm (7' 10.5" x 33.5") | Hand switch          | Replicates footswitch functions for operation at the backside of the table |
| Table top travel  |                                   |                      |                                                                            |
| longitudinal      | ±60 cm (±23.6")                   |                      |                                                                            |
| transverse        | ±18 cm (±7.1")                    |                      |                                                                            |
| Brakes            | Electromagnetic                   |                      |                                                                            |



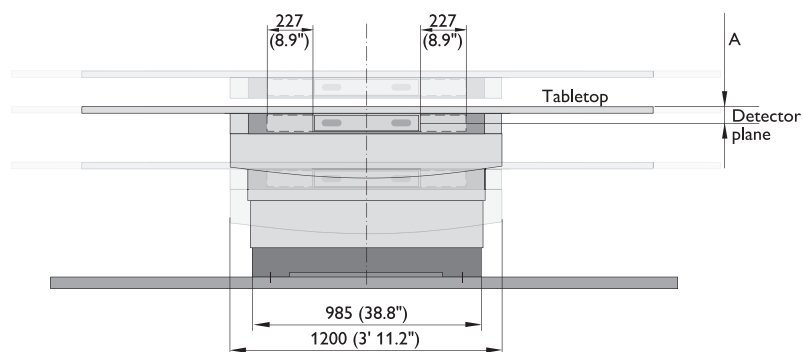
Digital TH table with removable SkyPlate



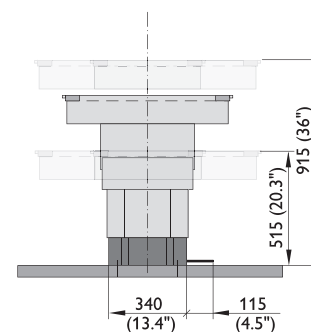
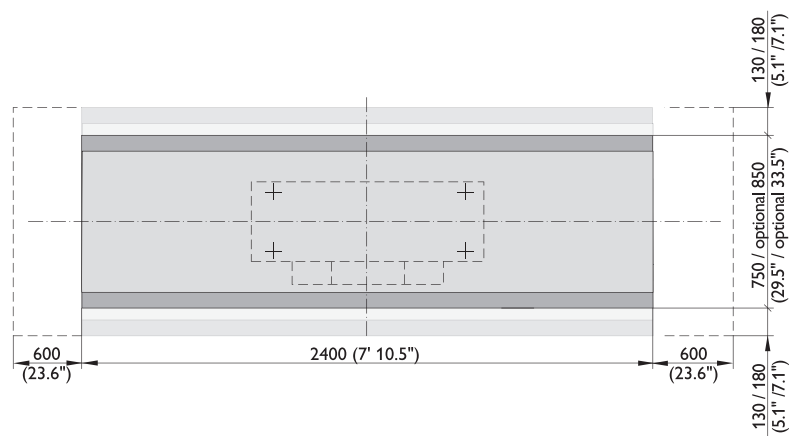
Alternatively with fixed detector

## Dimensions

All dimensions in mm (feet/inches)



|                                      | <b>A</b><br>Tabletop-detector<br>plane distance |
|--------------------------------------|-------------------------------------------------|
| Fixed detector-<br>standard tabletop | 69 (2.7")                                       |
| Fixed detector-<br>wide tabletop     | 80 (3.2")                                       |
| SkyPlate-standard<br>tabletop        | 65 (2.6")                                       |
| SkyPlate-wide<br>tabletop            | 75 (2.9")                                       |



## 11.2 Single side suspended table TH-S

| Table base                    |                                                                                                                                                                                                                                                                        |               |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Height adjustment             | <ul style="list-style-type: none"><li>• 50.3 cm to 90.3 cm (19.8" to 35.6 ") motorized adjustment</li><li>• Electronic physical protection system with motor shutdown for downward movement</li></ul>                                                                  |               |
| Table weight                  | 214 kg (471 lbs)                                                                                                                                                                                                                                                       |               |
| Maximum patient weight        | 225 kg (496 lbs)                                                                                                                                                                                                                                                       |               |
| Table top                     |                                                                                                                                                                                                                                                                        |               |
| Type                          | Floating tabletop of sandwich design with Kevlar overlay, flat top                                                                                                                                                                                                     |               |
| Dimension (l x w)             | 260 cm x 75 cm (8' 6.4" x 29.5")                                                                                                                                                                                                                                       |               |
| Thickness of table top        | 4.7 cm (1.9")                                                                                                                                                                                                                                                          |               |
| Length X-ray transparent area | 2.08 m (6' 9.9")                                                                                                                                                                                                                                                       |               |
| Table top travel              |                                                                                                                                                                                                                                                                        |               |
| longitudinal                  | ±20 cm (±7.9"), hydraulic brakes                                                                                                                                                                                                                                       |               |
| transverse                    | ±20 cm (±7.9"), hydraulic brakes                                                                                                                                                                                                                                       |               |
| Attenuation equivalent        | ≤1.4 mm (0.06") Al equivalent at 100 kV                                                                                                                                                                                                                                |               |
| Patient coverage              | Longitudinal                                                                                                                                                                                                                                                           | Transversal   |
| With fixed detector           | 208 cm (6' 9.9")                                                                                                                                                                                                                                                       | 83 cm (32.7") |
| Footswitches                  |                                                                                                                                                                                                                                                                        |               |
| Functions                     | <ul style="list-style-type: none"><li>• Table height adjustment down / up</li><li>• Disengage table top brakes in longitudinal and transverse directions</li><li>• Switch on cross light in the collimator (all footswitches)</li><li>• Footswitch interlock</li></ul> |               |

### Optional

| Table swivel                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Maximum rotation movement 0° to 90° around vertical table base</li> <li>• 2 lock positions to be configured at 0° and -90° or +90°</li> <li>• Rotation configured at installation to be either clockwise or counter clockwise</li> <li>• Installation: into the floor or in a double floor before system installation</li> <li>• Available as pre-delivery material</li> </ul> |



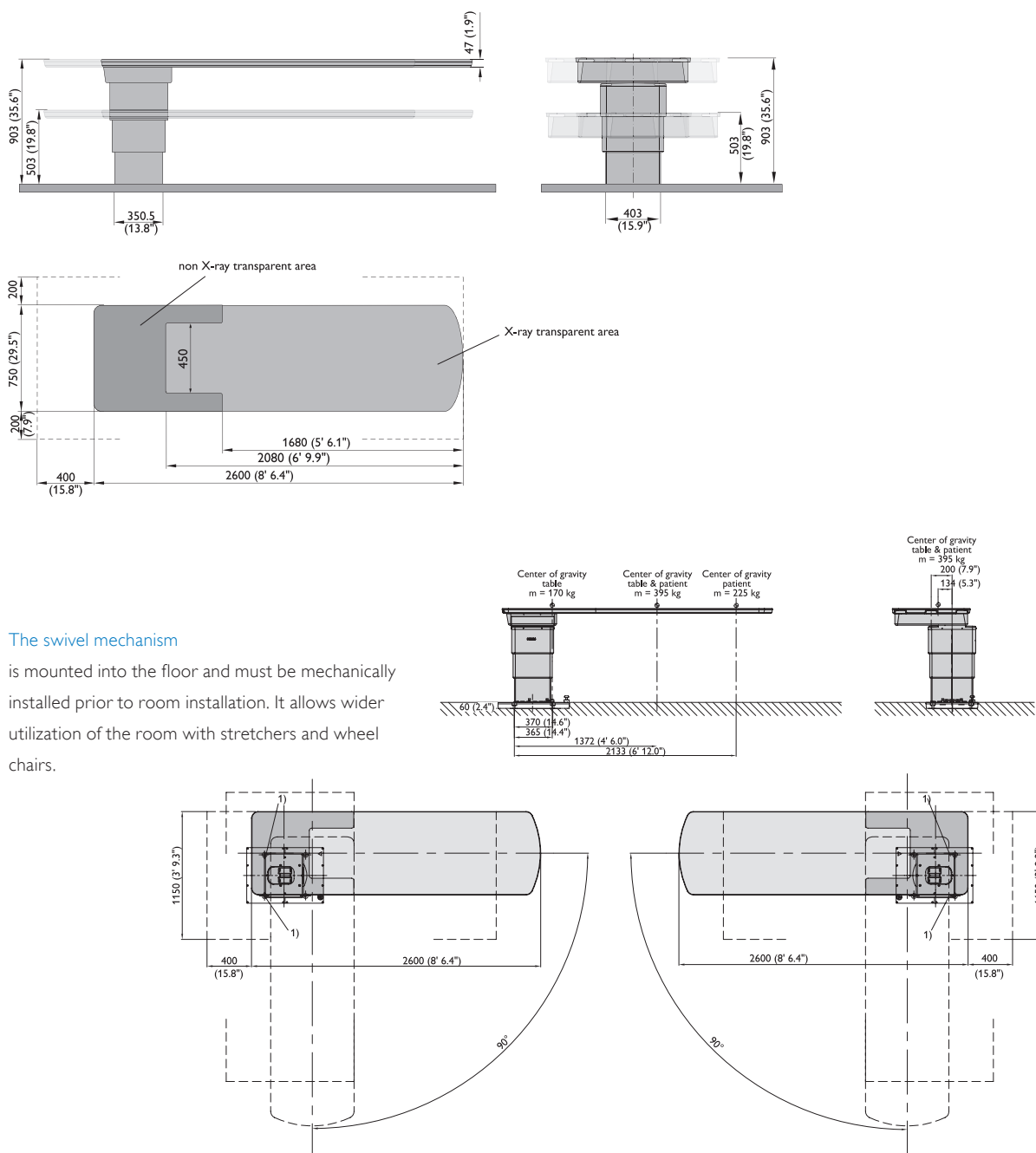
The swivel unit allows to rotate the TH-S table 90° around the vertical axis of its base



Single side suspended table TH-S

## Dimensions

All dimensions in mm (feet/inches)



## The swivel mechanism

is mounted into the floor and must be mechanically installed prior to room installation. It allows wider utilization of the room with stretchers and wheel chairs.

### 11.3 Height adjustable trolley TA-M

| Trolley                           |                                                                            |
|-----------------------------------|----------------------------------------------------------------------------|
| Height adjustment                 | 60 cm to 86.5 cm (23.6" to 34") hydraulic adjustment                       |
| Dimensions with accessories, max. | 227 cm x 90 cm (7' 5.4" x 35.5")                                           |
| Total weight                      | 130 kg (286 lbs)                                                           |
| Maximum patient weight            | 225 kg (496 lbs)                                                           |
| Accessories                       | All accessories for the table TH-S can also be used with this trolley      |
| Brakes                            | Both sides                                                                 |
| Bariatric table top               |                                                                            |
| Type                              | Floating sandwich design tabletop with carbon fiber overlay, flat top side |
| Dimension (l x w)                 | 220 cm x 67 cm (7' 2.6" x 26.4")                                           |
| Thickness of table top            | 5.4 cm (2.1")                                                              |
| Length X-ray transparent area     | 1.73 m (5' 8.1")                                                           |
| Table top travel                  |                                                                            |
| longitudinal                      | floating by fixing the vertical axes of the wheels                         |
| transverse                        | ±10 cm (±4.3")                                                             |
| Attenuation equivalent            | ≤1.4 mm (0.06") Al equivalent at 100 kV                                    |



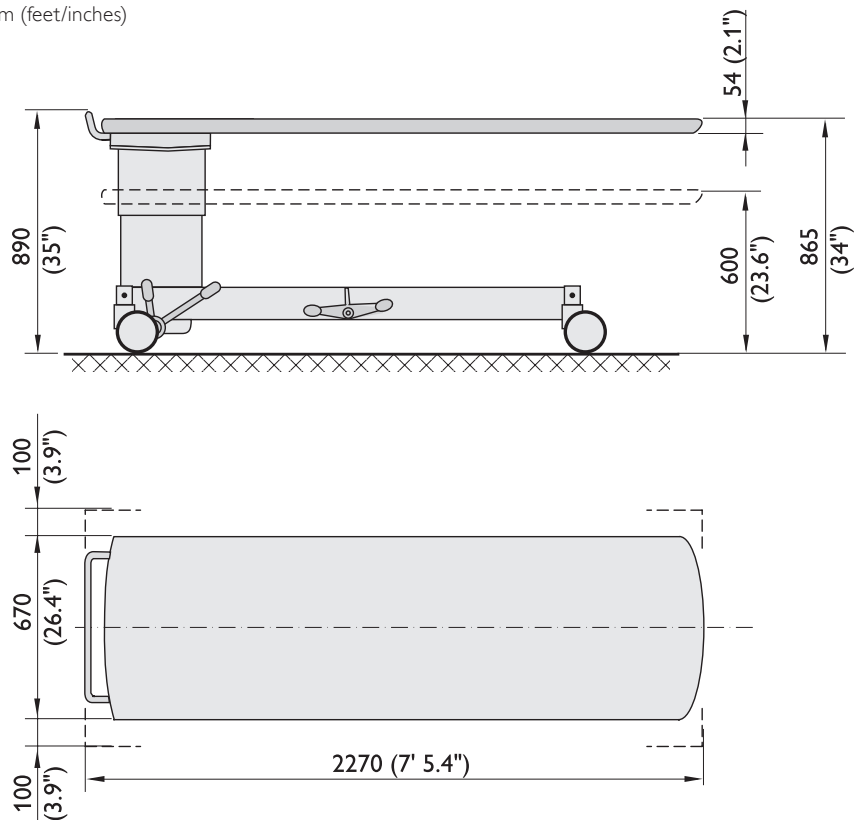
Enhanced room usage with fixed digital vertical stand and trolley



Height adjustable trolley TA-M

### Dimensions

All dimensions in mm (feet/inches)



# 12 Vertical stands

Carry out exams on different patient types comfortably, either with the fixed vertical stand or with the versatile moveable vertical stand. The smart concept behind the moveable vertical stand allows for efficient upright, cross-lateral and under-the-table exams. Virtually unlimited synchronized detector and tube pre-positions, made possible by full motorization, facilitate a smooth workflow.

## 12.1 Moveable multi-purpose stand VM

| Stand                               |                                                                                    |   |
|-------------------------------------|------------------------------------------------------------------------------------|---|
| Hardware                            | Counterbalanced rugged column for motorized vertical movement of the detector unit |   |
| Vertical travel                     | 35 cm to 185 cm (13.8" to 6' 08"), measured at center of detector                  | 1 |
| Horizontal travel                   |                                                                                    | 2 |
| motorized                           | 3.475 m (11' 4.8")                                                                 |   |
| non-motorized                       | 3.71 m (12' 2.1")                                                                  |   |
| with extension rails, motorized     | 5.5 m (18' 0.5")                                                                   |   |
| with extension rails, non-motorized | 5.5 m (18' 0.5")                                                                   |   |
| Installation                        | Floor attachment in combination with wall or ceiling attachment                    |   |
| Multi-purpose arm                   |                                                                                    |   |
| Swiveling range                     | 0° to 90° (right or left orientated execution)                                     | 3 |
| Lock-in positions                   | manual or every 15°                                                                |   |
| Detector unit                       |                                                                                    |   |
| Dimension (w x h)                   | 59.6 cm x 57.5 cm (23.5" x 22.6")                                                  |   |
| Tilt angle, horizontal axis         | -20° to +90°, motorized tilting                                                    | 4 |
| Tilt angle, vertical axis           | +45° to -23°, manual tilting                                                       | 5 |
| Automatic exposure control (AEC)    | 5 AEC measuring fields                                                             |   |
| Operating                           | 2 user interfaces (left & right) and wireless remote control                       |   |
| Grid storage                        | For up to 2 grids within the detector unit                                         |   |
| Grips                               | Patient grips arranged on the left and the right of the detector unit              |   |
| Brakes                              | All movements are locked when system is switched off.                              |   |
| Fixed detector                      |                                                                                    |   |
| 43 cm x 43 cm (17" x 17")           |                                                                                    |   |

### Optional

| Vertical stand LCD display |                                                                                                                                                                                                     | Patient stretch grip |                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Type                       | 16.5 cm (6.5") adjustable LCD information display                                                                                                                                                   | Patient stretch grip | <ul style="list-style-type: none"> <li>• Arranged on the top left or right of the detector unit</li> <li>• Rotatable</li> </ul> |
| Data displayed             | <ul style="list-style-type: none"> <li>• Patient first and last name</li> <li>• Date of birth</li> <li>• ID/Accession number</li> <li>• Examination name</li> <li>• Grid inserted yes/no</li> </ul> |                      |                                                                                                                                 |
| Compatibility              | with VS and VM vertical stands                                                                                                                                                                      |                      |                                                                                                                                 |



Optional vertical stand LCD display

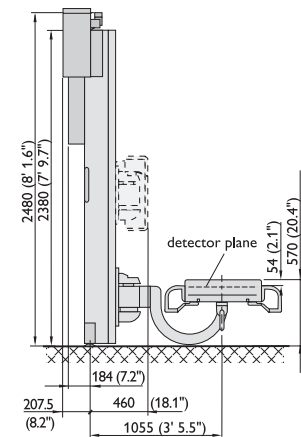
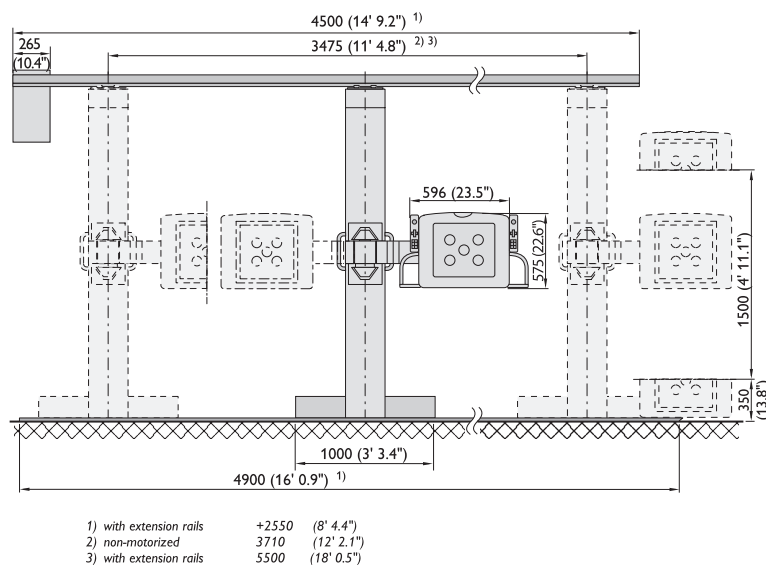
### The moveable multi-purpose stand VM consists of

- Stand
- Multi-purpose arm
- Detector unit
- 2 user interfaces (left & right)
- 2 patient grips (left & right)
- Floor rail with wall or ceiling rail
- Wireless remote control
- Vertical stand LCD display (optional)

The vertical stand VM can be positioned for table exams, cross table laterals or standing chest work

### Dimensions

All dimensions in mm (feet/inches)



## 12.2 Fixed vertical stand VS

| Stand                            |                                                                                          |
|----------------------------------|------------------------------------------------------------------------------------------|
| Hardware                         | Counterbalanced rugged column for motorized and manual vertical movement of the detector |
| Vertical travel                  | 30 cm to 180 cm (11.8" to 5' 11"), measured at center of detector <b>1</b>               |
| Installation                     | Floor and wall attachment or floor only (optional)                                       |
| Detector unit                    |                                                                                          |
| Dimension (w x h)                | 59.6 cm x 57.5 cm (23.5" x 22.6")                                                        |
| Automatic exposure control (AEC) | 5 AEC measuring fields                                                                   |
| Operating                        | 2 user interfaces (left & right) and wireless remote control                             |
| Grid storage                     | For up to 2 grids within the detector unit                                               |
| Grips                            | Patient grips arranged on the left and the right of the detector unit                    |
| Brakes                           | All movements are locked when system is switched off                                     |

### Detectors

Fixed detector  
43 cm x 43 cm (17" x 17")  
or  
Removable SkyPlate 35 cm x 43 cm (14" x 17") \*

### Optional

#### Motorized tilting

Tilt angle, horizontal axis **2**  
-20° to +90°

#### Vertical stand LCD display

|                |                                                                                                                                                                                                     |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type           | 16.5 cm (6.5") adjustable LCD information display                                                                                                                                                   |
| Data displayed | <ul style="list-style-type: none"> <li>• Patient first and last name</li> <li>• Date of birth</li> <li>• ID/Accession number</li> <li>• Examination name</li> <li>• Grid inserted yes/no</li> </ul> |
| Compatibility  | with VS and VM vertical stands                                                                                                                                                                      |

#### Patient stretch grip

|                      |                                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Patient stretch grip | <ul style="list-style-type: none"> <li>• Arranged on the top left or right of the detector unit</li> <li>• Rotatable</li> </ul> |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|



Grid storage for up to two grids within the detector unit

\* System may be configured at installation with either right or left loading of the SkyPlate.

Fixed stand VS with removable SkyPlate



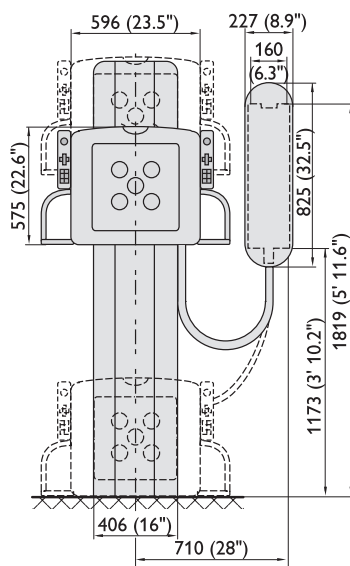
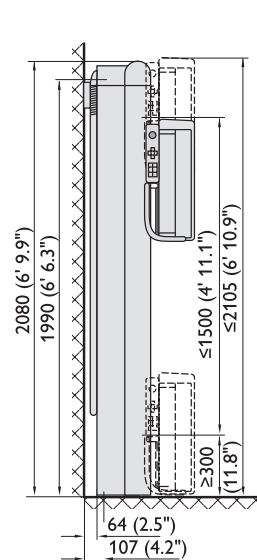
Alternatively with fixed detector

### The digital vertical stand VS consists of

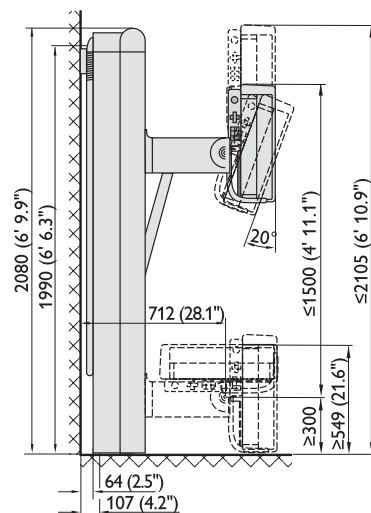
- Stand
- Detector unit
- Grid
- 2 user interfaces (left & right)
- 2 patient grips (left & right)
- Wireless remote control
- Vertical stand LCD display (option)

### Dimensions

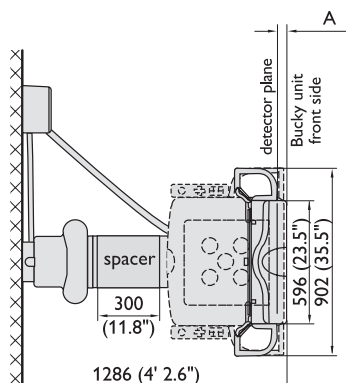
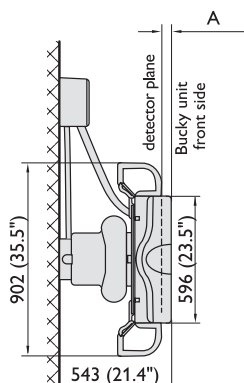
All dimensions in mm (feet/inches)



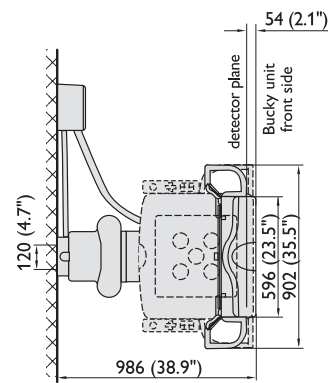
with tilting (option)



with spacer (option)



with tilting (option)



|                | A             |
|----------------|---------------|
| SkyPlate       | 49.4 (1.9'')  |
| Fixed detector | 53.7 (2.11'') |

# 13 Ceiling suspension CSM

The ceiling suspended tube automatically moves horizontally along the two ceiling rails, vertically up and down the telescopic column, while two further directions are available directly at the tube. This optional 5-axes motion and rotation flexibility supports all your DR exams. Tube tracking, auto-collimation of the tube and alignment of tube and detector allow you to give patients center stage.

| Column                                                  |                                                                                                                                         |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Type                                                    | 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")    | 2.83 m to 3.21 m (8' 8.3" to 10' 5.9")                                                                                                  |
| Movements                                               |                                                                                                                                         |
| Longitudinal travel with Comfort Track and Comfort Move | 3.44 m (11' 3.4")                                                                                                                       |
| Longitudinal travel with Comfort Position               | 3.28 m (10' 9.1")                                                                                                                       |
| Transverse travel                                       |                                                                                                                                         |
| short                                                   | 1.50 m (4' 11")                                                                                                                         |
| long                                                    | 3.22 m (10' 6.7")                                                                                                                       |
| Vertical travel                                         | 1.65 m (5' 5.2")                                                                                                                        |
| Tube assembly                                           |                                                                                                                                         |
| 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                                                                                 |
| Tube assembly rotation                                  |                                                                                                                                         |
| around vertical axis                                    | 360° (±180°) with lock position every 45°                                                                                               |
| around horizontal axis                                  | ±125°, lock positions 0° and ±90°                                                                                                       |

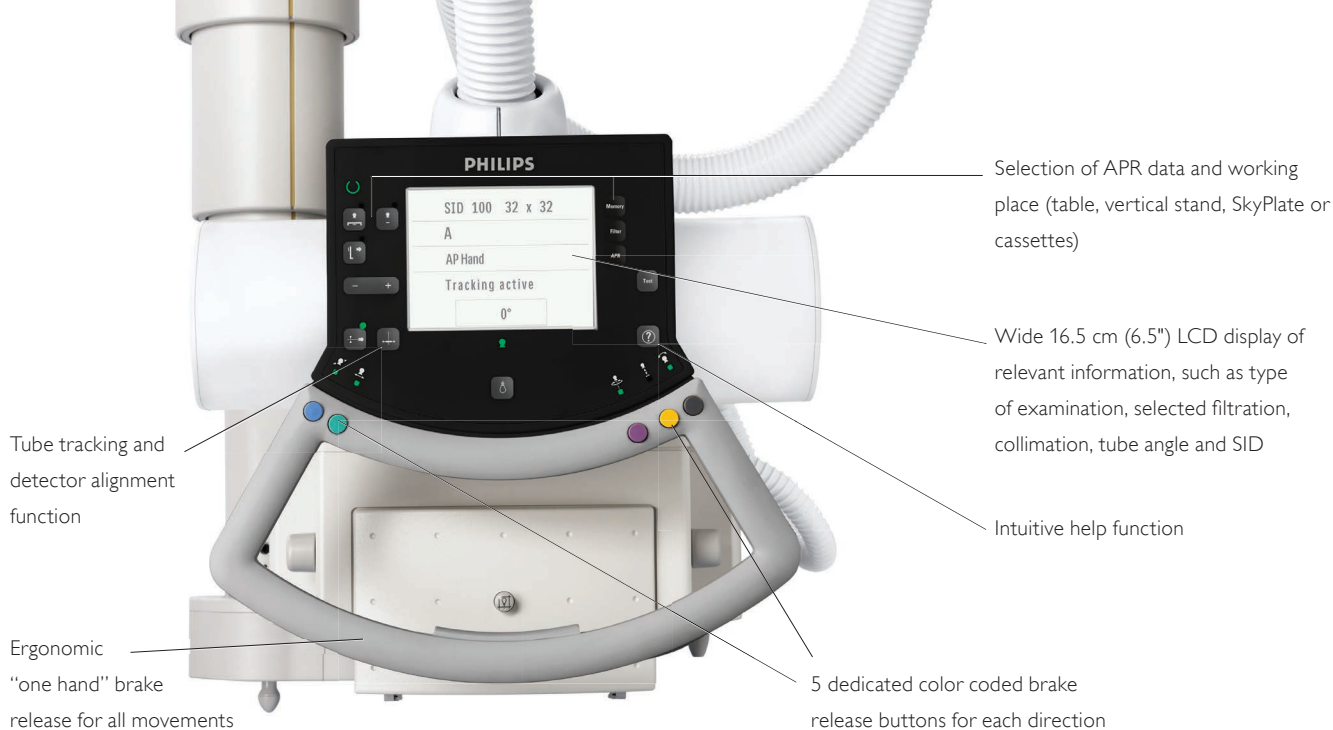
| Collimator                             |                                                                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                                   | <ul style="list-style-type: none"> <li>• Motorized automatic collimation</li> <li>• manual overrule possible</li> <li>• with light field indicator</li> </ul> |
| Angle of aperture and rotation         | 2 × 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                          | <ul style="list-style-type: none"> <li>• 2 mm Al or</li> <li>• 1 mm Al + 0.1 mm Cu or</li> <li>• 1 mm Al + 0.2 mm Cu</li> </ul>                               |
| Source-image distance measurement tape |                                                                                                                                                               |

| Rail system     |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Hardware        | Ceiling rail system made of anodized aluminium for long service life |
| Length of rails | 4.3 m (14' 1.3")                                                     |

## Optional

| Extended longitudinal travel                            |                   |
|---------------------------------------------------------|-------------------|
| Longitudinal travel with Comfort Track and Comfort Move | 6.14 m (20' 1.7") |
| Longitudinal travel with Comfort Position               | 5.98 m (19' 7.4") |

| Second laser                                 |  |
|----------------------------------------------|--|
| Second laser for fixed source-image distance |  |



### Choose your level of room motorization

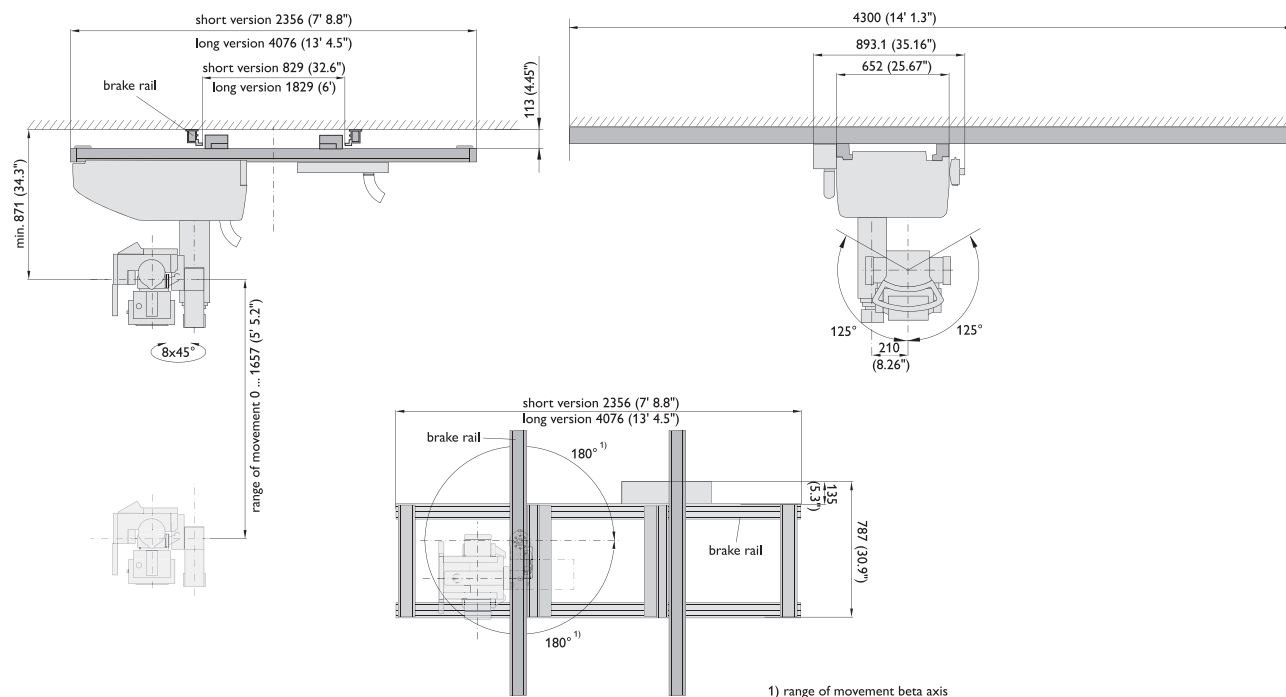
- **Comfort Track:** Elaborated vertical stand, table and ceiling suspended tube motorization level including tube tracking
- **Comfort Move:** Advanced room motorization level including move-to-position
- **Comfort Position:** Total room motorization including 5-axes automation of the ceiling suspended tube

### The ceiling suspension CSM consists of

- 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 markers for preferred source-image distance

### Dimensions

All dimensions in mm (feet/inches)



# 14 SkyFlow

Naturally, the decision is always yours whether or not to use a grid. When working without a grid, SkyFlow – the industry's first scatter correction technology for portable thorax X-rays – provides you with grid-like image contrast. Applied in combination with the large SkyPlate, you can work quickly and conveniently by avoiding the time and effort of attaching and detaching a grid.

## Uncompromising procedures

Gridless exams mean you don't have to carry, position and align an anti-scatter grid. Nevertheless, with SkyFlow you can achieve grid-like contrast. You and your patients can benefit from enhanced workflow compared to working with a grid. Potential retakes due to grid cut-off or misalignment are avoided – simply because there is no grid.

## Uncompromising image quality

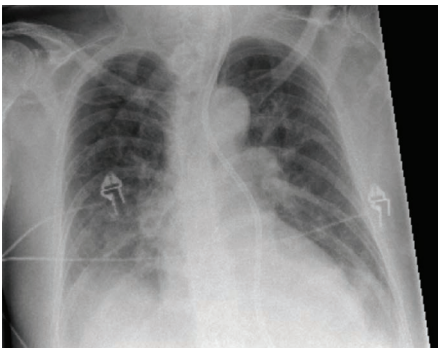
If you are used to working without a grid you will appreciate the enhanced SkyFlow image contrast which does not influence your workflow and dose level. More specifically, SkyFlow requires no technologist input since it automatically adjusts contrast enhancement based on the amount of scatter. You do not have to change your chest exam routine and no extra training is necessary.

## All patient types

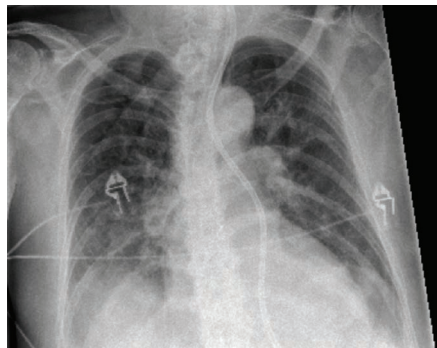
SkyFlow automatically adjusts contrast enhancement based on the amount of scatter for each individual patient type. Therefore, it is suitable for a wide range of patient types, and particularly beneficial for bariatric patients. Short exam times also contribute to high patient comfort.

## Main benefits at a glance

- Save time with gridless workflow and benefit from automatic image contrast enhancement
- Achieve excellent image quality with grid-like contrast for all patient types, including bariatric
- Focus fully on the patient with automatic operation, short exam times, and comfortable positioning



Reference image acquired without grid



Same exposure, but processed with SkyFlow

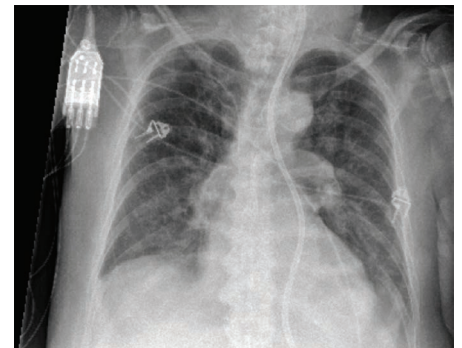


Image of same patient acquired on a different day. A grid was used, and X-ray dose was increased by a factor of 1.6

# 15 SkyPlate detector sharing

SkyPlate sharing allows you to utilize your budget and customize your SkyPlate disposition. The small SkyPlate is particularly useful for sharing because its specialized application range creates opportunities to apply it in different DR rooms as well as with a mobile DR unit. Similarly, you can use the large SkyPlate for free exams in different areas and additionally insert it in vertical stands or table trays.

## Cost efficiency as the driver

- In today's medical world facilities have to be mindful of the budget while maintaining their competitive edge
- SkyPlate sharing is a convincing answer to financial constraints
- With a fixed expenditure, room utilization can be increased even more

## Possible scenarios for SkyPlate sharing

- If there are times during the day when one SkyPlate would be enough to cover the workload
- If the hospital is equipped with several digital radiography rooms in close proximity which only occasionally need a SkyPlate
- If the medical facility only needs mobile radiography units at certain times during the day



High level of flexibility with reduced initial investment

## Main benefits at a glance

- Low initial investment while assuring a high level of flexibility
- Back-up solution to provide continuous uptime
- Smart starting point for expansion, i.e. adding more SkyPlates to your department in the future



Each SkyPlate contains the SkyPlate sharing software license

# 16 Automatic image stitching

The automatic image stitching software is a dedicated orthopedic feature to automatically acquire long-length images. Image acquisition is possible in both projections, horizontally on a patient table, or vertically in front of a vertical stand. A set of smart accessories provides excellent patient comfort and superb image quality.

## Main benefits at a glance

- Ability to do stitching procedures with vertical stand and also on the table
- Easy for the technologist to use by simply defining the collimation on the patient
- System automatically acquires the number of images needed based on the defined collimation
- Automatic tube and detector movements during acquisition
- Acquisition of two or three images depending on collimation
- Software automatically stitches acquired images into one composite image
- Optional patient stand for streamlined patient positioning
- Single-focus tube rotation to reduce image distortions
- Dedicated orthopedic measurements included

## Optional accessories

- Patient support
- Pair of adjustable positioners
- Additional lead ruler for patient support or table
- Parking frame for accessories

## Specifications with fixed detector

|                                    |                     |
|------------------------------------|---------------------|
| Number of acquired images          | up to 3             |
| 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") |
| Overlap area between images        | 4.5 cm (1.8")       |

## Specifications with large SkyPlate

|                                                                     |                  |
|---------------------------------------------------------------------|------------------|
| Number of acquired images                                           | up to 3          |
| Patient coverage at vertical stand                                  |                  |
| Portrait orientation                                                | 117.3 cm (46.2") |
| Landscape orientation                                               | 94.5 cm (37.2")  |
| Patient coverage at the table in portrait and landscape orientation | 90 cm (35.5")    |
| Overlap area between images                                         | 4.5 cm (1.8")    |

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

When combined with PCR integration, this software also allows automatic image stitching to be performed with long view PCR cassettes.



Image acquisition with patient support at vertical stand VM



# 18 VarioFocus

Philips unique VarioFocus option is a generator technology that provides outstanding image resolution by simultaneously using both the small and large tube filament. This provides the high resolution of the small focus and the greater power of the large focus and may result in longer tube life.

## Main benefits at a glance

- Outstanding image quality through mixed focus spots adapted to each examination
- Outstanding resolution at the power level required
- Reduced exposure time
- Reduced motion artifacts
- Reduced geometrical blur
- Fully automatic

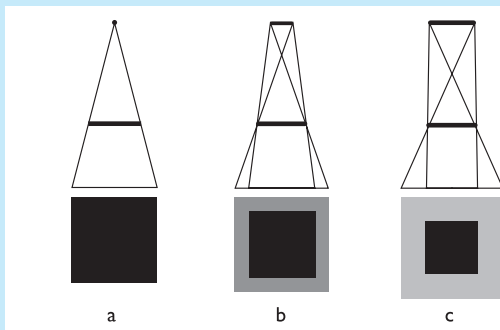
By using both focus spots simultaneously to define a variable focus spot, Philips VarioFocus automatically balances the power on both focus spots in a defined ratio, providing excellent image resolution at any required power. In addition, tube filaments are preserved through power balancing on both focus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



Principle of the "mixed" focus spots, here with a diagram



Cathode head with two filaments of a double focus tube



## Increase in geometrical blur with different sizes of focus spots and constant object size

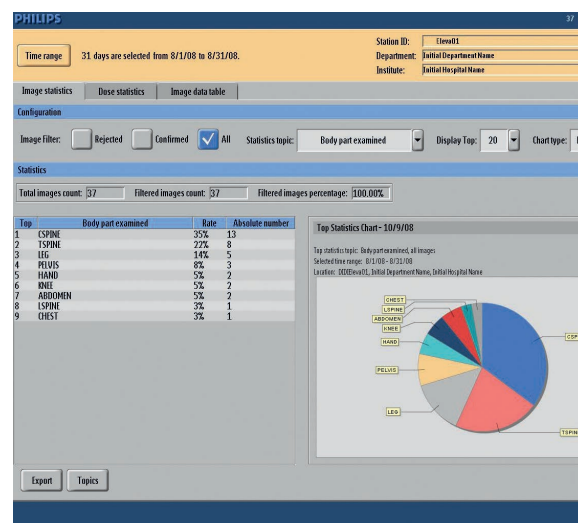
- Ideal focus spot with no geometrical blur
- Medium-sized focus spot generates minimal geometrical blur
- Large focus spot generates pronounced geometrical blur

# 19 Clinical QC

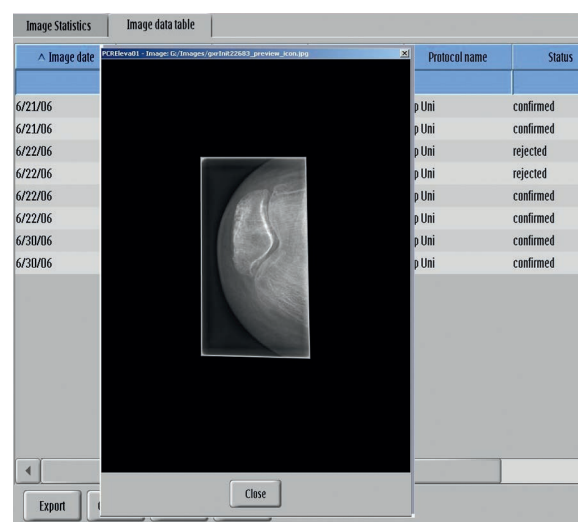
Analyze operator-rejected images and reasons for rejection with this powerful image statistic tool. It also serves to monitor and analyze general parameters. Download the data files in standard format for further usage or archive them on a PC. Clinical QC provides valuable support for your department quality standards and for teaching situations.

## Main benefits at a glance

- Easy and convenient monitoring of departmental quality standards
- Dose documentation per image and examination
- Presets of reasons for image rejection
- Define time period statistics
- Data filtering on rejected and confirmed examinations
- Data filtering on body area, operators and dates
- Statistic presentation as bar or pie chart at Eleva workspot
- Export results in universal CSV format for use with external spreadsheet software



Convenient image statistics with Clinical QC



Clinical QC reject analysis

# 20 Ambient Experience

Philips Ambient Experience can help patients feel more comfortable and relaxed and provides a unique approach to the radiology environment. Knowledge of how people feel, work and interact with each other and with technology are reflected in a purposefully created environment that combines design strategies and enabling technologies.

## Main benefits at a glance

- Patients are more involved in their own treatment when they can personalize the exam room
- Relaxed and comfortable environment thanks to positive distractions
- Enhanced patient privacy through opaque privacy glass (optional)

The control system integrates video projection, dynamic lighting and audio elements which can provide both positive distraction for the patient and an opportunity to personalize an otherwise intimidating environment. All Ambient Experience functionality is accessed with a wireless touch screen interface. On/off, volume control, color and video theme selection are selected on a touchscreen tablet.

## Main components (depending on individual project realization)

### Wall projection

Patient selectable audio, video & lighting themes

Palette of individual colors for LED “wall wash”

Specialized ceiling-mounted projector

### Dynamic ambient cove lighting

Cove lighting from 5-50 meters (or 15-150 feet) depending on the room size

Selectable colors on side walls aligned with video animation

Dynamic colored lighting can also be selected without video projection

### Touch screen tablet

Wired/wireless 12" touch screen for system control and theme selection

Docking station for touch screen



## Wall mounted patient touch screen

A variety of themes can be selected by the patient to transform the room with projected images, dynamic colored lighting and sound, designed to relax and soothe.



## Side wall projection

Themes can be chosen by patients to personalize their experience.



## Cove lighting

Dynamic cove lighting corresponds to the chosen theme.

Walls are washed by soft and warm hues of red, green, yellow and blue transforming the room into a patient and staff friendly environment.

# 21 Standard scope of delivery

The difference is in the details. The standard DigitalDiagnost scope of delivery contains a huge number of tools and features which enhance your workflow in different phases of your digital radiography exams. Experience intuitive and seamless procedures with the system geometry, with the premium Eleva user interface and while using UNIQUE image processing.

## System geometry benefits

### Comfort Track room motorization

- Motorized X-ray table TH or TH-S to accommodate the desired working height and to limit user and patient physical involvement
- Motorized vertical stand VS or VM to set the appropriate detector height according to patient height
- Motorized ceiling suspension column to keep the source-to-image distance (SID) constant while adjusting the proper working height of the table or working height at the vertical stand (tube tracking)
- Auto collimation and collimation light for improved workflow

### Color coded directions to operate the ceiling suspension

For improved ergonomics and better workflow

### One hand grip to release all directions/axis of the ceiling suspension

Allows for fast and easy tube positioning

### Memory button at tube head

To easily switch between the last manual collimation and the automatic preset

### Test button

Initiates test run prior to automatic image stitching examinations for improved patient safety

### “?” button at tube head

Simple support to position the geometry correctly

### Foldable foot pedals at TH table

For increased hygienic management

### “Stop all table movement” function

Blocks table movements such as operating the floating table top or table height adjustments for improved patient safety

### Accessory rails at TH table

Allows the use of dedicated accessories directly at the patient table

### User Interface at both sides of vertical stand VS and VM

For improved ergonomics and better workflow

### Upper & lower beam alignment feature

Allows for fast and precise decentered collimation e.g. for upright chest examinations

### Portrait/Landscape collimation flip feature

Provides improved user convenience and faster workflow

### 5 AEC chambers for vertical stand VS and VM

Allows for flexible patient positioning and optimal dose management

### Adequate grid usage depending on detector type and application

- Oscillating, low frequency grids for all detectors in the table or vertical stands
- Fixed, low frequency grids plus grid removal software for the SkyPlate (free exposures only)
- Allows for superb dose reductions while retaining high image quality, plus wide range of required SIDs

### Storage area for grids behind the detector

Provides improved user convenience and faster workflow

## Premium Eleva benefits

### Eleva touch screen

Designed for DR working environments for high ergonomics and fast DR workflow

### Eleva user interface

Easy to learn, efficient user interface across X-ray modalities, designed with end-users for use in DR working environments

### Individual operator login and user profiles

To meet high IT security demands with improved efficiency by automatically filling in dedicated input fields

### Built in help feature based on function

Provides improved user convenience and faster workflow

### Eleva Review Plus

Provides dedicated review environment and tools for image review at the Eleva workstation

### Eleva Workflow Plus

Provides smart tools for an improved and fast workflow such as automatic image markers or the intuitive RIS code learning feature for on-the-fly configuration of new or changed RIS codes

### User-configurable and operator-depending user interface

For improved ergonomics and individualized workflow

### Move tool

Allows for fast & easy corrections in case of operator error

### Auto ranger function

Automatic selection of the optimal anatomically relevant image area for image processing

### ROI pointer function

Manual selection of a dedicated, anatomically relevant image area for image processing

### Window width/ Window level (WW/WL) function

For fast and precise image gray level adjustments

### One-button dose adaption

Sets the desired dose level for the next exposure for improved dose management

### Full screen viewing mode

For improved clinical review and quality management of images

### High quality display including DICOM display standard

Provides optimal image quality at the Eleva user interface display

### User accessible DICOM verify function

For easy access to the availability status of all connected, external DICOM nodes (e.g. PACS, RIS)

### Image rotation tool

Precise manual image rotation (by 0.5°) and semi-automatic rotation for fast image correction and review

### 7 patient types function (automatically and manually)

Optimal adaptation of critical examination parameters for improved dose management and image quality ranging from babies (newborn patients) to extra large adult patients

### Advanced Eleva Dose reporting

Individual patient dose and cumulative daily dose reports can be printed for easy dose management

## UNIQUE image processing benefits

### 4 different user modes

Automatic, manual basic, manual advanced and manual expert to meet individualized image processing requirements

### Virtually unlimited number of processing presets

To cover even the most specialized views and application procedures

### Interactive & real time image processing

Provides instant visual feedback on manual processing parameter changes for fast and intuitive re-processing.

### View dependant VOILUT selection

VOILUT can be selected for dedicated views only or for all views to meet individual user demands

### Intuitive, easy to handle UNIQUE user interface

Medical-oriented processing features and feature names to allow for fast and intuitive use





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