



PHILIPS

DuraDiagnost F30

Digital radiography

Trustworthy DR

Key advantages

- Easy-to-use
 - Diagnostic confidence
 - World class experience
-

Budgetary considerations may vary, but the need for quality never does. Philips DuraDiagnost F30 is easy to use and delivers functionality essential for general radiography examinations. Designed for improved workflow and long lasting durability, DuraDiagnost F30 is a truly smart investment.

Gain a competitive edge with DuraDiagnost F30.

Introduction

DuraDiagnost F30 provides ease of entry into the world of digital radiography with a price to performance ratio that's hard to beat. DuraDiagnost F30 helps simplify the path to clinical decision-making, improves outcomes for patients, and reduces your imaging department burden.



Elewa workstation

The intuitive Elewa user interface is harmonized with those found on all Philips digital radiography systems



Wireless portable detector

Enjoy an imaging area of 35 cm x 43 cm (14" x 17") with the flexibility to perform table, vertical stand and free examinations using just one detector

Eleva workspot

Eleva is the easy-to-learn platform common across Philips DR that makes workflow continuity and network communication simple. Eleva offers pre-sets and customized user profiles to speed up your workflow. With Eleva, it's just three steps to complete an examination.

Eleva workspot

Hard disk	500 GB total
Image data	200 GB
RAM storage capacity	8 GB
Interfaces	Ethernet 10/100/1000 Base-T Gigabit DICOM interface Detector interface Memory stick support for QC
CD writer	DVD/CD writer
Monitor	19" LCD color monitor
Keyboard with mouse and function buttons	For entering administrative patient data and for operating the screen menus

Image data

Data volume	Up to 15 MB/image
Matrix depth	16 bit/pixel

Power supply

Mains voltage	115 V / 230 V (+10% - 15%)
Mains frequency	50 Hz / 60 Hz

DICOM

DuraDiagnost F30 is DICOM compatible. This means that you can benefit from all relevant DICOM services offered via this common medical data transfer standard. Storing, retrieving, printing and other features may enhance your workflow. DICOM Print functionality is always included. An additional DICOM package is optionally available which includes:

- DICOM WLM and Classic RIS (Work List Management)
- DICOM MPPS (Modality Performed Procedure Step)
- DICOM Image Export, which includes the services DICOM Store and Storage Commit

Key Eleva benefits

Eleva user interface

Easy to learn, user interface across X-ray modalities, designed with end-users for use in DR work 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 optional

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

User-configurable and operator-dependent user interface

For individualized workflow

Move tool

Allows for fast and easy corrections in case of operator error

Auto ranger function optional

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

ROI pointer function optional

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

Window width/ Window level (WW/WL) function

For fast image gray level adjustments

Full screen viewing mode

For improved clinical review and quality management of images

High quality display including DICOM display standard

Provides high image quality at the Eleva user interface display



Eleva workspot with integrated generator control

Detector

Perform a wide variety of examinations with just one detector. The wireless portable detector can be easily used in the table, in the vertical stand, or for free exams. The large imaging area of 35 cm x 43 cm (14" x 17") helps cover your region of interest.

Wireless portable detector

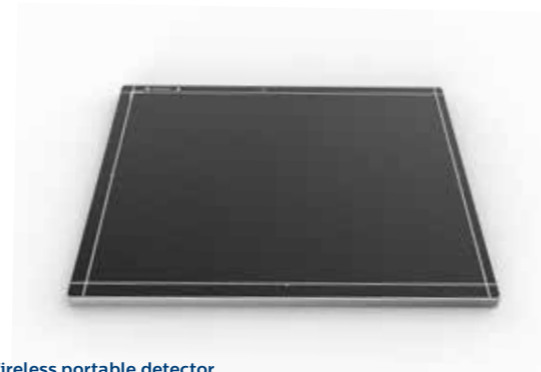
Type	Digital wireless portable flat detector
Scintillator	High Stability Scintillator
Detector size	350 mm x 430 mm (approx 14" x 17")
Active Area	34.4 cm x 42.7 cm (approx 13.5" x 16.7")
Image matrix size	2476 x 3072 pixels
Active pixel area	2456 x 3052 pixels
Pixel size	139 µm
Detector pixels	7.6 Megapixels
A/D conversion (bits)	16 bits
Weight (incl. battery)	3.6 kg approx. (7.93 lbs)
Dimensions (H x W x D)	38.35 cm x 45.95 cm x 1.5 cm
Time of exposure to image preview	8s or less
Battery charging time empty to full	3.5 h max. for 100% charge to full
Battery operating time	800 images, 6 h

	DQE (%)	MTF (%)
0.5 lp/mm	33	77
1 lp/mm	28	55
2 lp/mm	17	24
3 lp/mm	7	10

Ratio (r)	SID (fo)	SID range
10	140 cm (55")	106 to 208 cm (42 to 82")
12	110 cm (44")	94 to 131 cm (37 to 52")

Optional

Wireless portable detector protector
Handle frame
Moveable bed holder
Additional batteries
Additional battery charger
Accident protection program
Mobile detector holder



Wireless portable detector

UNIQUE image processing

Experience consistent, diagnostic quality with Philips UNIQUE image processing software.

UNIQUE optimizes every link in the imaging chain. It harmonizes contrast levels, highlights faint details, and adapts parameters to provide wide image dynamics, while still maintaining a natural, artifact-free appearance. UNIQUE is ideal for both viewing on the monitor and printing. The parameters can be adapted to meet user preferences.

UNIQUE image processing at a glance

- Harmonizes contrast
- Enhances weak details and attains detail accuracy in all areas
- Achieves consistent image quality



X-ray generation

The X-ray tube provides excellent performance over a long lifetime. The Philips generator features modern architecture based on a modular design. It uses high performance components, which can be combined into customer specific solutions. The generator control console is integrated in the Eleva user interface to streamline workflow.

Generator

High-voltage generator	The converter generator generates high voltage equivalent to DC voltage
Mains voltage	380 - 415 V (+/-10%), 50 Hz or 60 Hz, 3 Phase
Max. mains resistance at 400 V	0.3 Ohm
Max. mains current at 400 V	125A
Fuses	Yes
Nominal power (IEC)	50 kW
Max. tube voltage	125 kV or 150 kV (optional)
Max. tube current (at 70 kV)	630 mA
Max. tube current(at 100 kV)	500 mA
mAs product (with AEC Control)	0.4 mAs to 500 mAs
Exposure time	5 ms to 4 s
Safety	Tube overload protection Automatic mains voltage compensation

X-ray tube	50 kW
Maximum voltage	150 kV
Focal spot	0.6/1.2
Maximum power with focal spot 0.6	27kW
Maximum power with focal spot 1.5/1.2	75kW
Anode angle	12°
Anode heat storage capacity	210kJ(300kHU)
Assembly heat capacity	900 kJ (1250kHU)
Continuous anode input Power	120 W (169 HU/s)
Anode speed	9700/min
Total filtration minimum	0.9 mm Al

Collimator	
Type	Manual, with light field indicator
Angle of aperture and rotation	+45°, -45°
Timer switch	30 s
Inherent filter value	2 mm Al equivalent
Added filters	3.5 mm AL
LED light	Yes

Anatomically Programmed Radiography

Anatomically Programmed Radiography (APR) helps you achieve a high level of exposure accuracy by selecting filters based on the anatomy of the patient. There are several anatomical programs to choose from, each tailored by Philips for enhanced efficiency.

A quick-to-find, application-oriented menu makes selection of the appropriate program fast and easy. For exams performed on a regular basis, customized shortcut keys can be assigned. Temperature conditions are closely monitored to protect against tube overload and to keep tube housing and parts from being damaged. Tube power availability is indicated on the generator control interface.

Automatic Exposure Control

The Automatic Exposure Control (AEC) sets the exposure time according to exposure voltage and object characteristics, in order to automatically obtain the correct exposure. AEC assists the radiographer in producing consistent images regardless of size or presence of pathology.

Dose Area Product meter*

The Dose Area Product (DAP) meter measures the X-ray dose output at the collimator and reports the measured Dose Area Product (mGy*m2) to the DICOM header of the image. With this DAP meter, technologists can easily check the X-ray dose and perform accurate dose reporting.

* (optional in China)



Measuring the SID

X-ray tube floor stand

The system's floor-mounted, counter-balanced X-ray tube stand is designed to allow the tube to easily glide along its supporting rails. The system's 180 degree tube column rotation offers flexibility for off-center examinations. Tube rotation movement is simple and smooth, requiring minimal effort to obtain oblique angles. This combination of positioning options assures coverage for a broad range of clinical applications.

X-ray tube floor stand column

Height	2260 mm
Room height minimum	2500 mm
Vertical movement range	1255 mm
Central beam minimum upper floor	457 mm
Central beam maximum upper floor	1712 mm
Rotation of X-ray tube around vertical axis	-90° to +180°
X-ray tube rotation	(+/-) 120°
Source-to-image-distance	Max. 1200 mm for table Max. 2610 mm for vertical stand

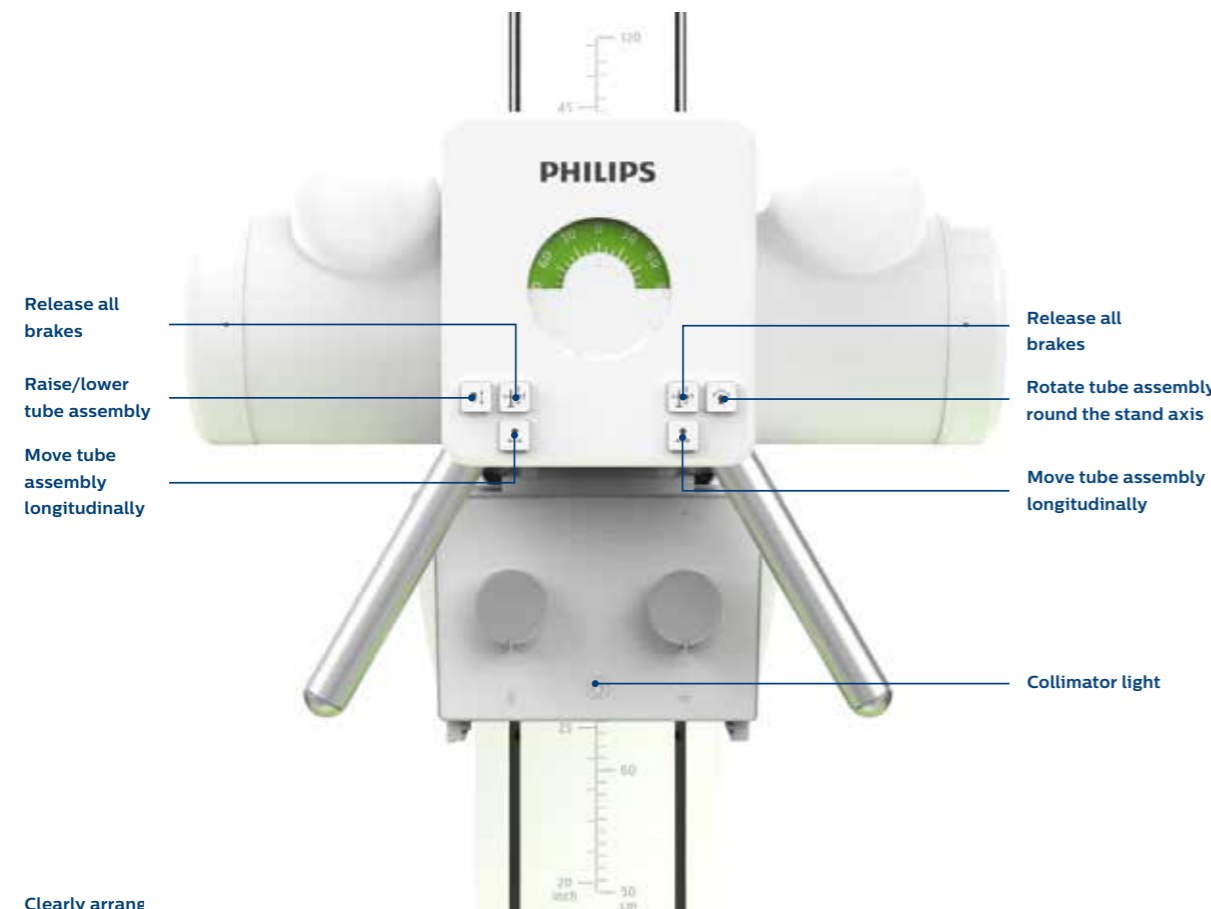
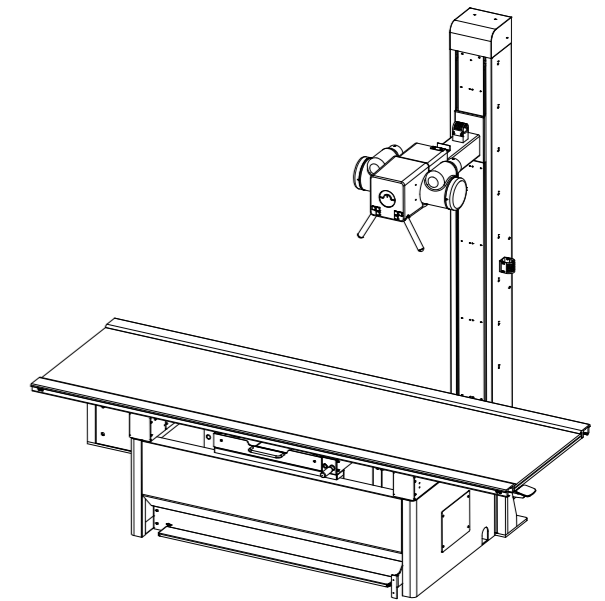
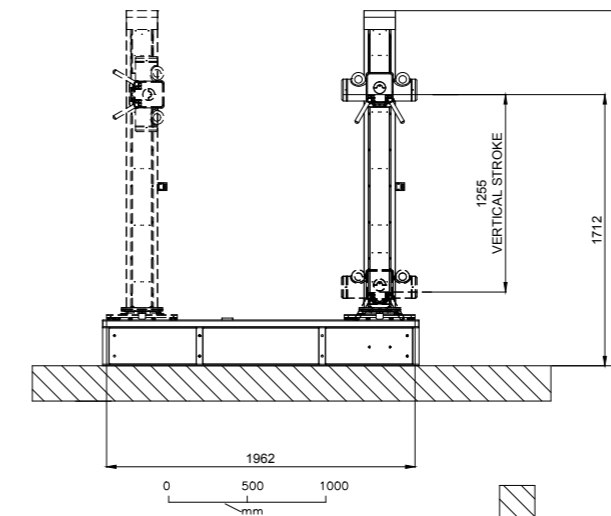
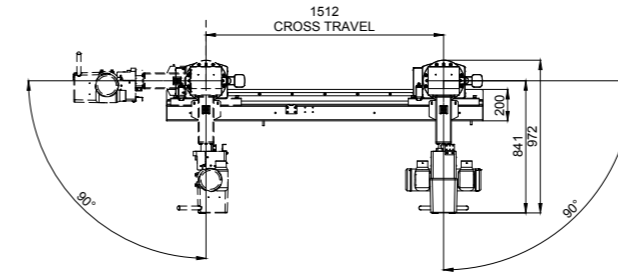
EasyMove

The EasyMove features assists you with quick positioning. The tube control buttons are intuitively designed and enable the user to execute the manual geometry movements with ease.

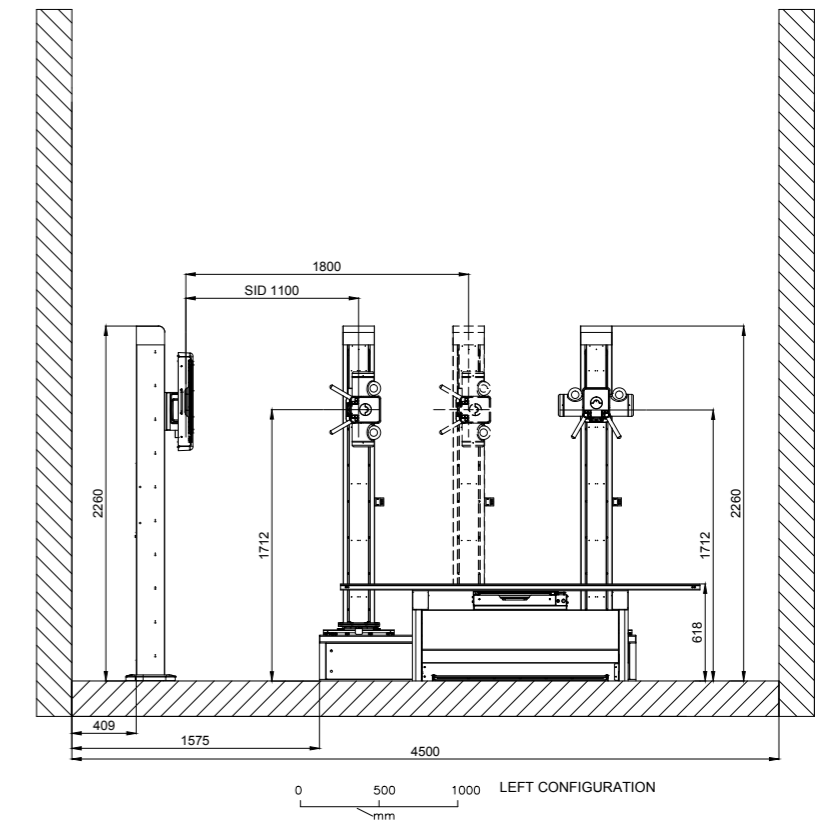
Default SID

No more need for floor markers. The preset Source-Image-Distance (SID) helps you quickly find the best spot for each exam.

All dimensions in mm



Clearly arrang



Table

The free-floating tabletop offers sufficient length and width to be suitable for a variety of patient types. The table movement offers smooth movement and a manual locking/unlocking function to secure hold its position. The tube and table detector can also be coupled for straight positions and decoupled for oblique projections to save alignment time.

Radiographic table

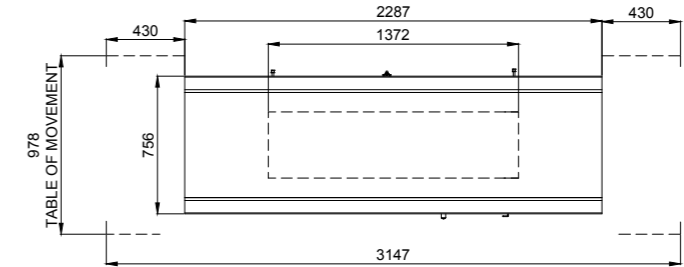
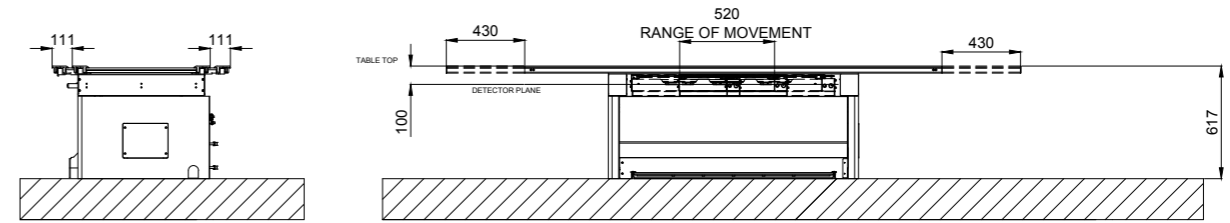
Type	Radiographic table with floating tabletop, removable grid and 3 AEC measuring chambers
Table height	617 mm
Table dimensions	2290 x 755 mm
Radiation absorption	Transparency <0.7 mm Al equilibration
Tabletop travel	Longitudinal: ± 430 mm (center to left and right 430 mm) Transverse ± 111 mm (center to left and right 111 mm)
Maximum patient load	200 kg
Object to detector distance	78 mm
Grids	520 mm (center to left and right 520 mm) Standard grid: 43 line/cm, R:12:1, fo: 1050 mm Table grid: 44 line/cm, 12:1, F: 110 cm (94 cm - 131 cm)

Coupling and decoupling

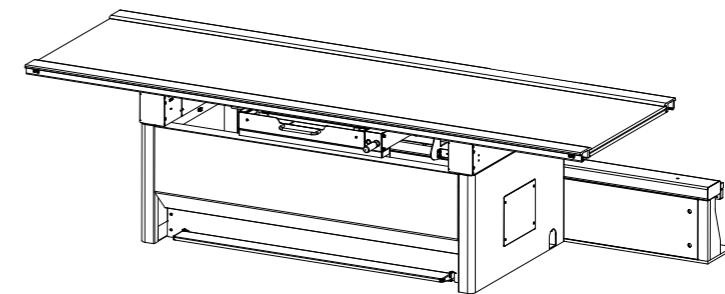
The coupling and decoupling function enables quick and easy alignment between tube and image receptor. It allows radiographers to perform examinations very fast, saving valuable time.

The tube and table detector can be coupled for abdominal projections and decoupled for oblique projections

All dimensions in mm



Fixed height table with floating table top



Vertical stand

The vertical stand can be adjusted quickly to cover a large range of standing examinations from small children to taller adults.

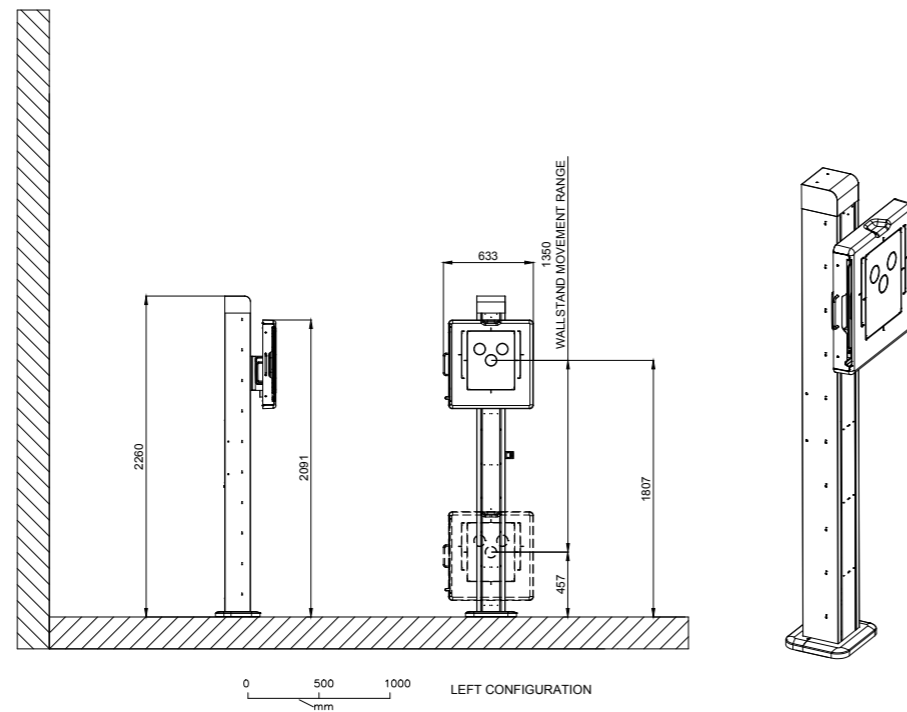


Vertical stand for portrait and landscape examinations

Vertical stand with detector tray

Type	Vertical stand with detector tray, grid and 3 AEC chambers
Height	2260 mm
Vertical movement (detector center)	457 to 1807 mm
Object-to-detector distance	46 mm
Grid	Standard grid: 44 line/cm, 10:1, F: 140 cm (125 cm -185 cm)
Detector positioning	Portrait or landscape, manual positioning

All dimensions in mm



Accessories

Trolley

Height	70 cm (27.6")
Weight	63 kg (139 lbs)
Max. patient load	135 kg (297 lbs)
Accessories	Two accessory rails for easy attachment

Table Top

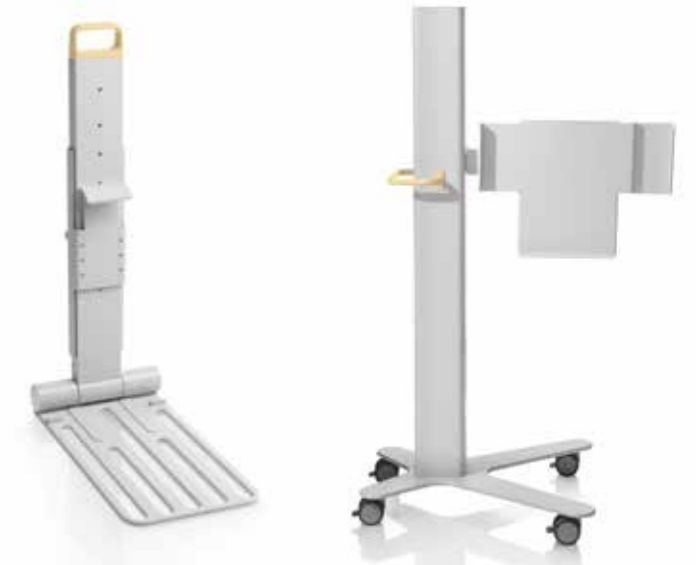
Type	Fixed table top
Dimension table top (l x w)	200 cm x 75 cm (6' 6.7" x 29.5")
Attenuation equivalent	<=1.1 mm Al

Brakes

Brakes	At each wheel
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General accessories

Hand grips	
Clip on grid portrait	
Clip on grid landscape	
Attachable detector handle	
Portable detector protector panel	
Mobile detector holder	
Mobile detector bed holder	



Mobile detector bed holder

Mobile detector holder

The system recommended operation environment conditions:

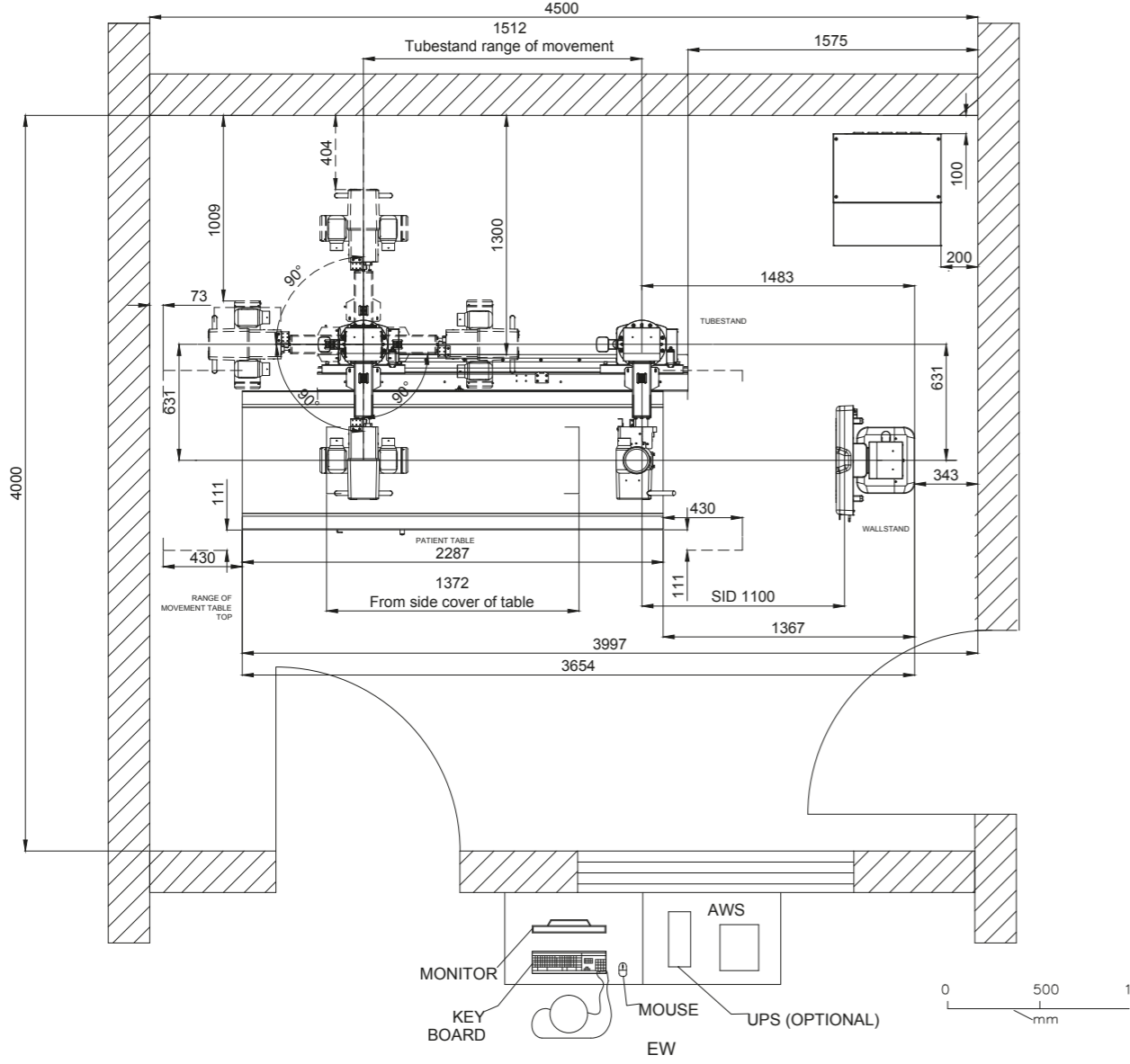
Environmental temperature:	+18 °C to +30 °C
Humidity:	30 % to 75 % no condensation
Air pressure:	700 hPa to 1060 hPa
Altitude:	<3000m
DICOM package	
Review Plus	

The storage and transport recommended condition:

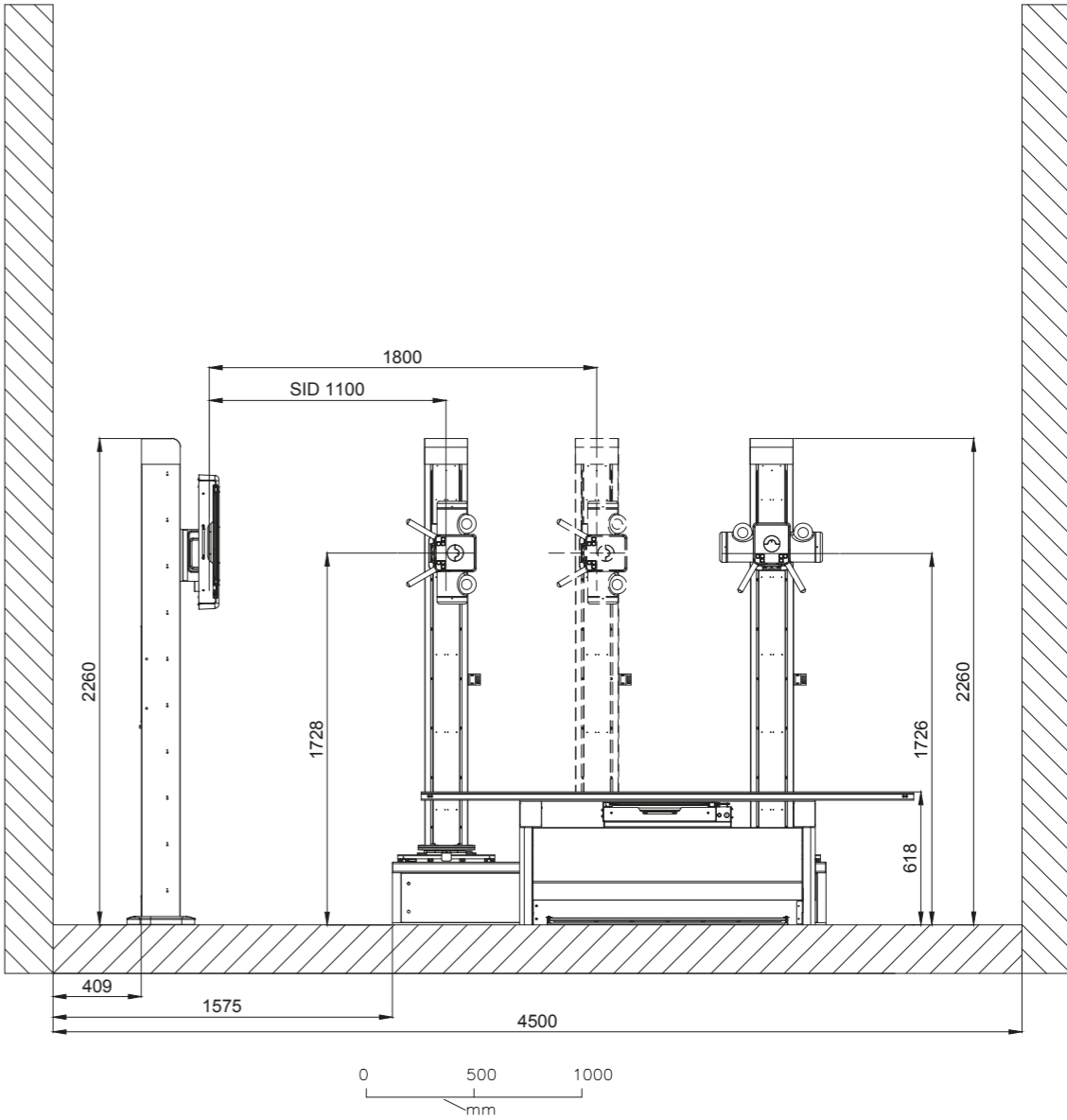
Environmental temperature:	-10 °C to +55 °C
Humidity:	20 % to 90 % no condensation
Air pressure:	700 hPa to 1060 hPa

Room layout

The following room layouts are proposals for a left and right configuration set up of the system.
 All dimensions in mm
 Right configuration



Left configuration



Customer services

The DuraDiagnost F30 is designed for high uptime use. Its plug-in concept allows for fast installation and simple mounting of spare parts with the help of a repair manual. (Spare parts are available as per terms and conditions)

Philips certified distributors and authorized service providers (ASPs) will support you as you care for your DuraDiagnost F30 system. Well-trained experts will install your system and be your direct line of contact when technical support is required.

Our Remote Service Engineers will connect to your DuraDiagnost F30 via our Philips Remote Services Network² and provide remote technical support to find the right solution fast. They can identify, diagnose, and troubleshoot the issue to put you on the path to resolution. System logs are automatically uploaded to Philips Radar Servers to support you.

¹ Based on local market terms and conditions

² Only for the DR system, and only in select markets

PHILIPS



DuraDiagnost F30 is not available for sale in North America

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