

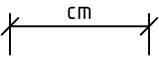
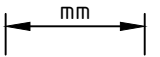


ARTIS icono Biplane

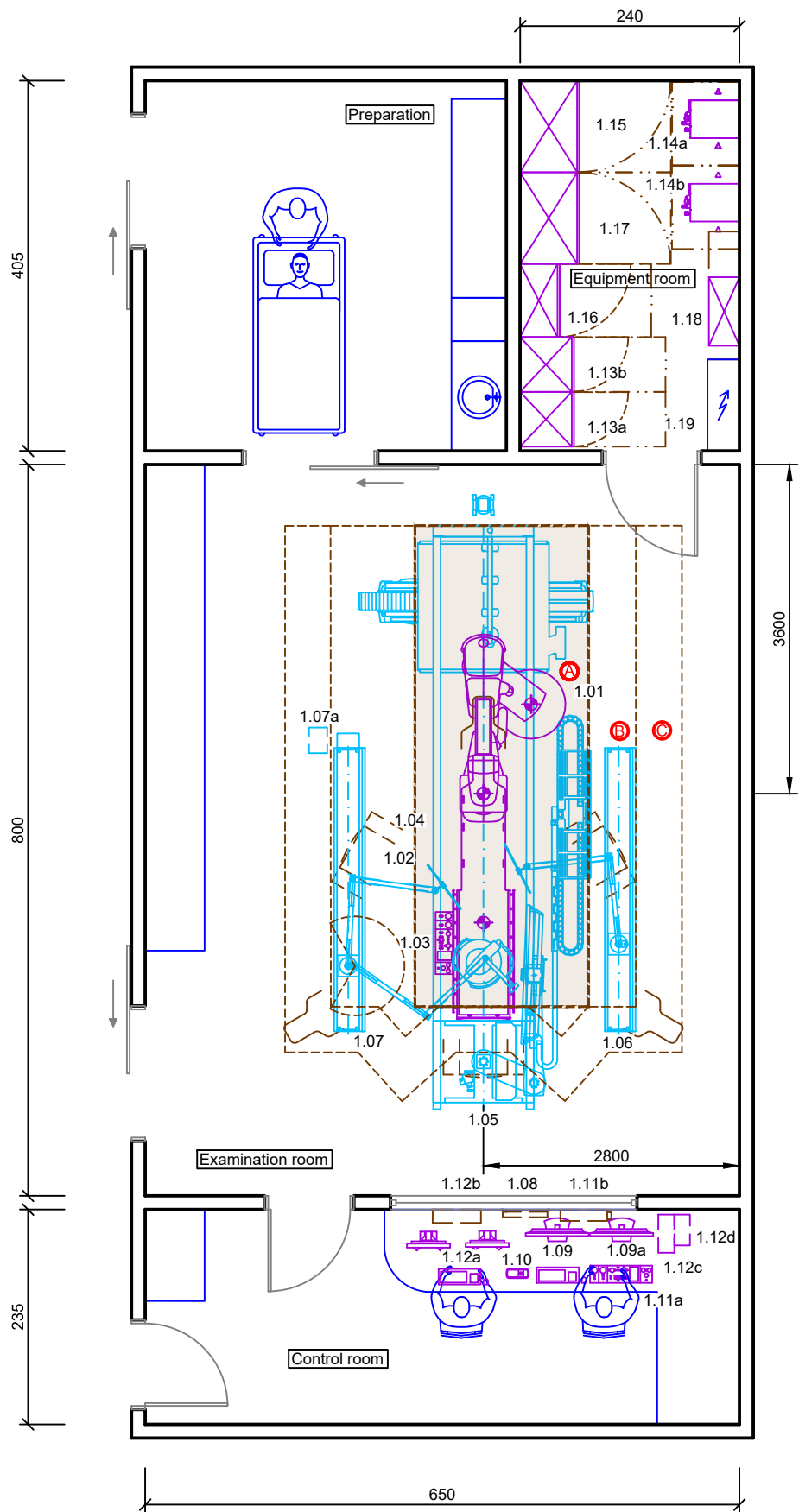
Basic Planning Information

Table of contents	
Planning Example	3
Room Dimensioning	5
Statics and Transport	8
Environment	12
Electrical Installation	13
General Information	14

Legend		
	Motion area / Swivelling range / Minimal room size / Safety distance	
	Service area	 Ceiling mounted
	Additional equipment	 Wall mounted
		 Floor mounted
		 New construction
		 Demolition

Dimensioning
All installation measurements apply to finished wall/floor/ceiling and are to be checked prior to assembling the unit.    Orientation point = reference point of the Siemens Healthineers unit for planning and installation Please note: The drawing parts in this document are not to scale!

Planning Example



ARTIS icono biplane - Equipment Legend				
Pos.	Description	Weight (kg), Heat dissipation to the air (W)		
		kg	W	Remark
1.01	Floor stand	670	200	
1.02	ARTIS standard table narrow	560	200	
1.03	Control console and ECC I on patient table	6	<25	
1.04	Ceiling stand	1108	200	
1.05	DCS Large Display 55" in rails	303	300	1120 mm, #21
1.06	Upper body radiation shield, moveable	71		optional
1.07	Upper body radiation shield with OR light LED, moveable	85		optional
1.07a	Transformer for LED-light			optional
1.08	Control Interface Box (CIB)	8	100	
1.09	Workplace - 32" Display with mouse and keyboard	ca. 20	ca. 70	
1.09a	Reference Display 32"	16.6	68	optional
1.10	Central Power Control (CPC)	1.4	100	
1.11a	Control module	5.7	25	
1.11b	Connection box for control module	8	100	
1.12a	Sensis Vibe Combo - 2 x 21" Display with mouse and keyboard	20	150	optional
1.12b	Sensis Vibe Combo - Control Room Cabinet CR2	20	28	
1.12c	Sensis Vibe Combo - Computer DMC	4	39	optional
1.12d	Sensis Vibe Combo - Tripplite SmartPro - UPS	16	650	optional
1.13a	Generator ACX	250	1200	incl. ATS for UPS 40 kVA
1.13b	Generator ACX	220	1200	
1.14a	Cooling unit - SMC one4all	28	4500	#23
1.14b	Cooling unit - SMC one4all	28	4500	#23
1.15	System control cabinet	440	4000	
1.16	Cable cabinet	120		optional
1.17	ATIS Image system	277	1750	
1.18	UPS Powerware 15kVA (CE) EATON incl. battery	253	600	optional, #14 / #16
1.19	Power distributor			by customer
	#14 total heat dissipation of 0,6 kW at a full load #16 in emergency mode #21 Weight incl. 1120mm rail extension (with 2000 mm rail extension this increases by 18 kg) #23 Without coolant (tank contents approx. 6,5 l coolant)			

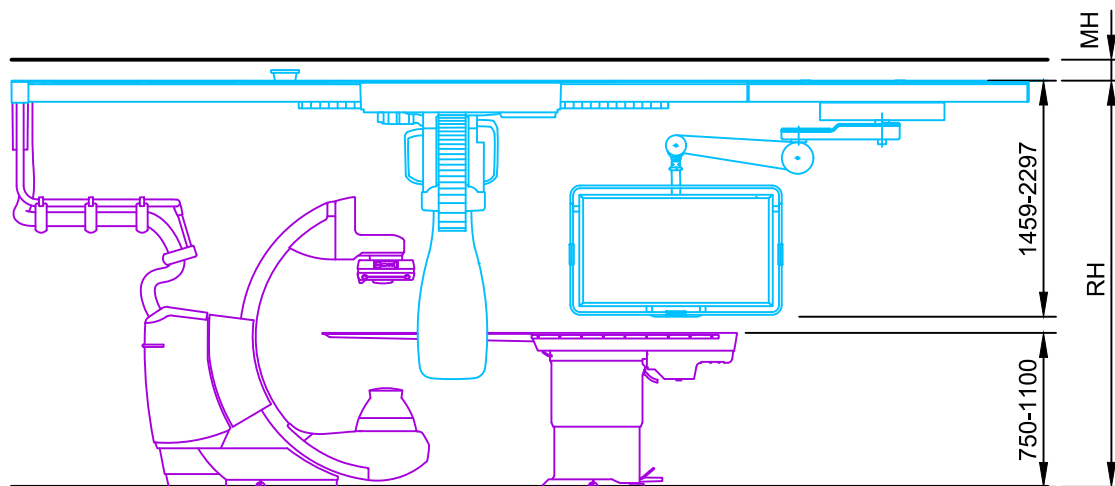
Room Dimensioning

Room dimensioning

The indicated room dimensions have to be checked on site. The planning department has to be informed about possible deviations. Otherwise we cannot assume any guarantee for the accurate implementation of the dimensions indicated in the planning documents.

Room height

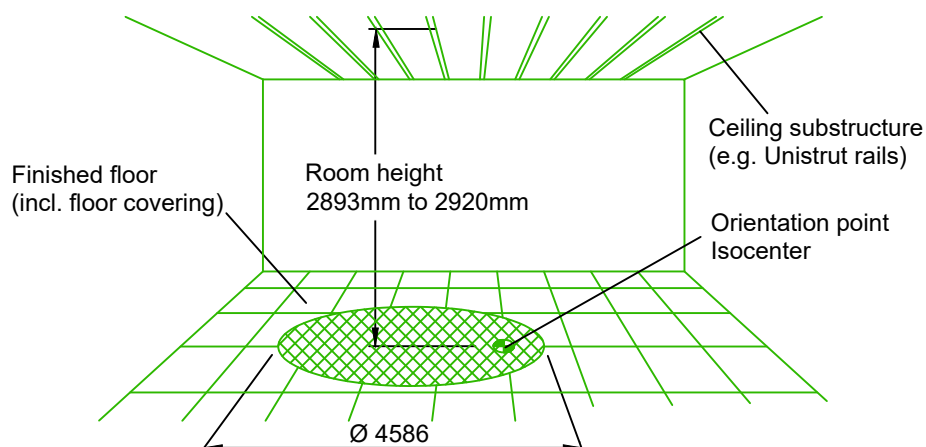
not to scale

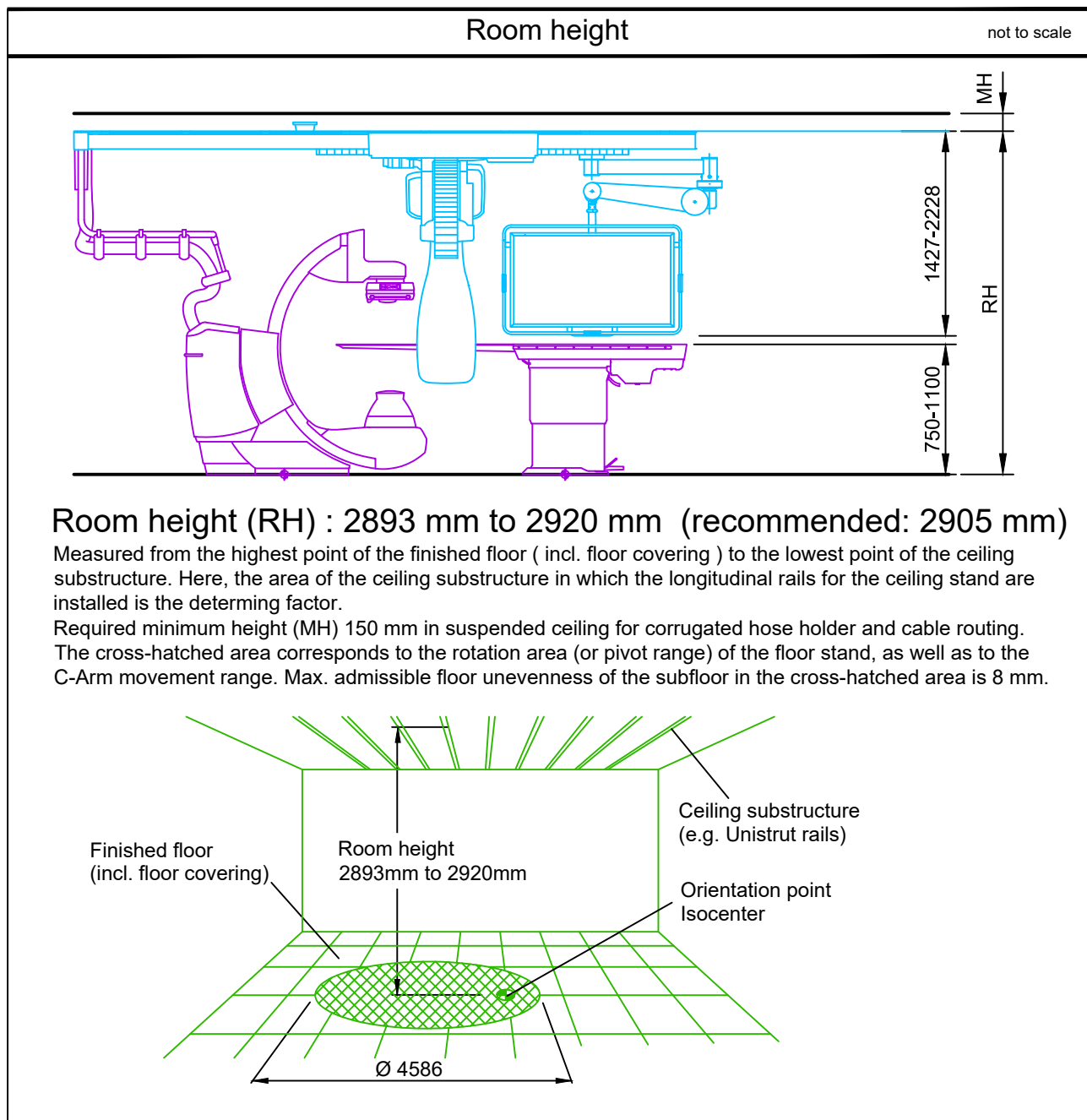


Room height (RH) : 2893 mm to 2920 mm (recommended: 2905 mm)

Measured from the highest point of the finished floor (incl. floor covering) to the lowest point of the ceiling substructure. Here, the area of the ceiling substructure in which the longitudinal rails for the ceiling stand are installed is the determining factor.

Required minimum height (MH) 150 mm in suspended ceiling for corrugated hose holder and cable routing. The cross-hatched area corresponds to the rotation area (or pivot range) of the floor stand, as well as to the C-Arm movement range. Max. admissible floor unevenness of the subfloor in the cross-hatched area is 8 mm.





Safety areas

not to scale

All components that do not belong to the Siemens Healthineers system are labeled as external system components.

When planning non-system components in the examination room, pay attention to the movement ranges of the system components (risk of collision!).

Safety areas for ceiling-mounted components in movement range of the system

Area **A** - In this area, no components that are not part of the system may be installed on the ceiling.

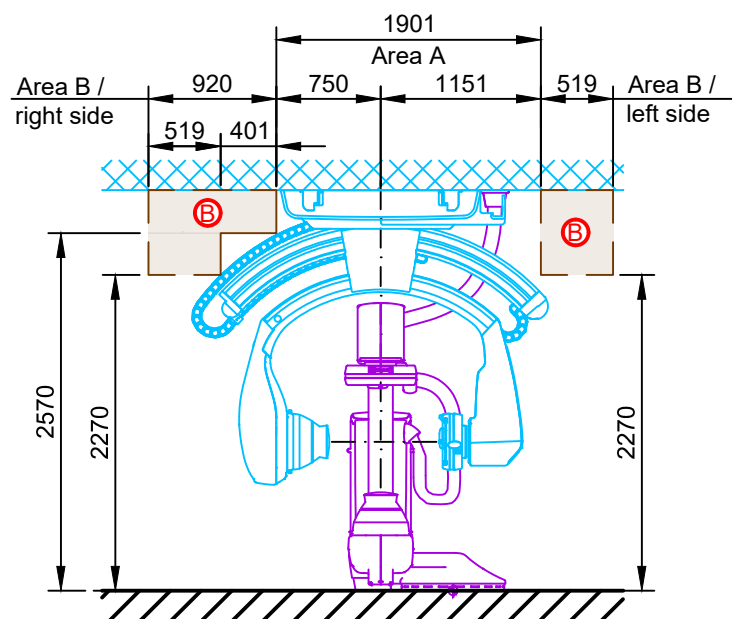
Area **B** - Non-system components that are installed in this area must meet the following requirements:

- minimum clear space between the bottom edge of the fixed part (e.g. support arm column) of the component and the finished floor: 2270 mm (left side) and 2270/2570 mm (right side).
- moving parts (e.g. support arm) of the components that are below the minimum height must be able to perform evasion to the outside of the max. movement range (including the safety distance) of the floor stand. Otherwise there is a risk of crushing for personnel or a risk of equipment damage.

Area **C** - represents the safety distance of 500 mm between motor-driven parts and personnel as defined by EN 60601.

Non-system components that are installed in this area must meet the following requirements:

- minimum clear space between the bottom edge of the fixed part (e.g. support arm column) of the component and the finished floor: 2000 mm.
- moving parts (e.g. support arm) of the components that are below the minimum height must be able to perform evasion to the outside the safety if there is a collision with the ceiling stand

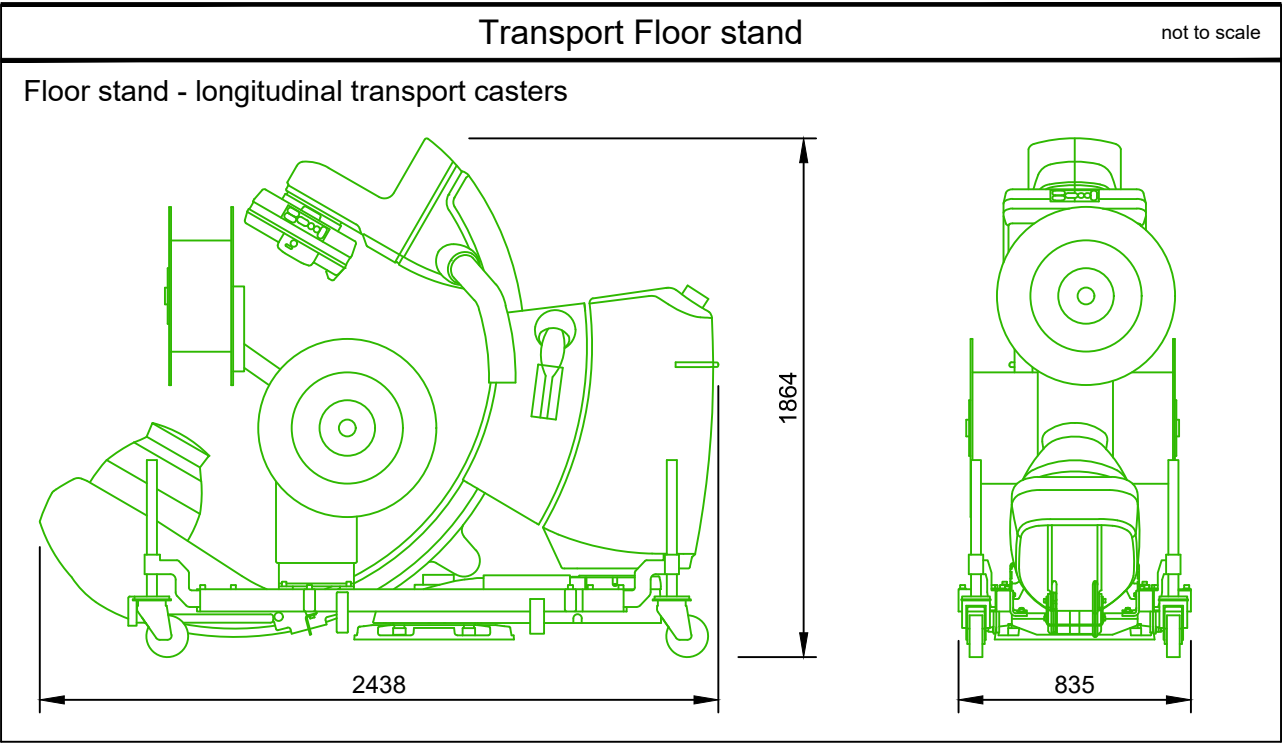
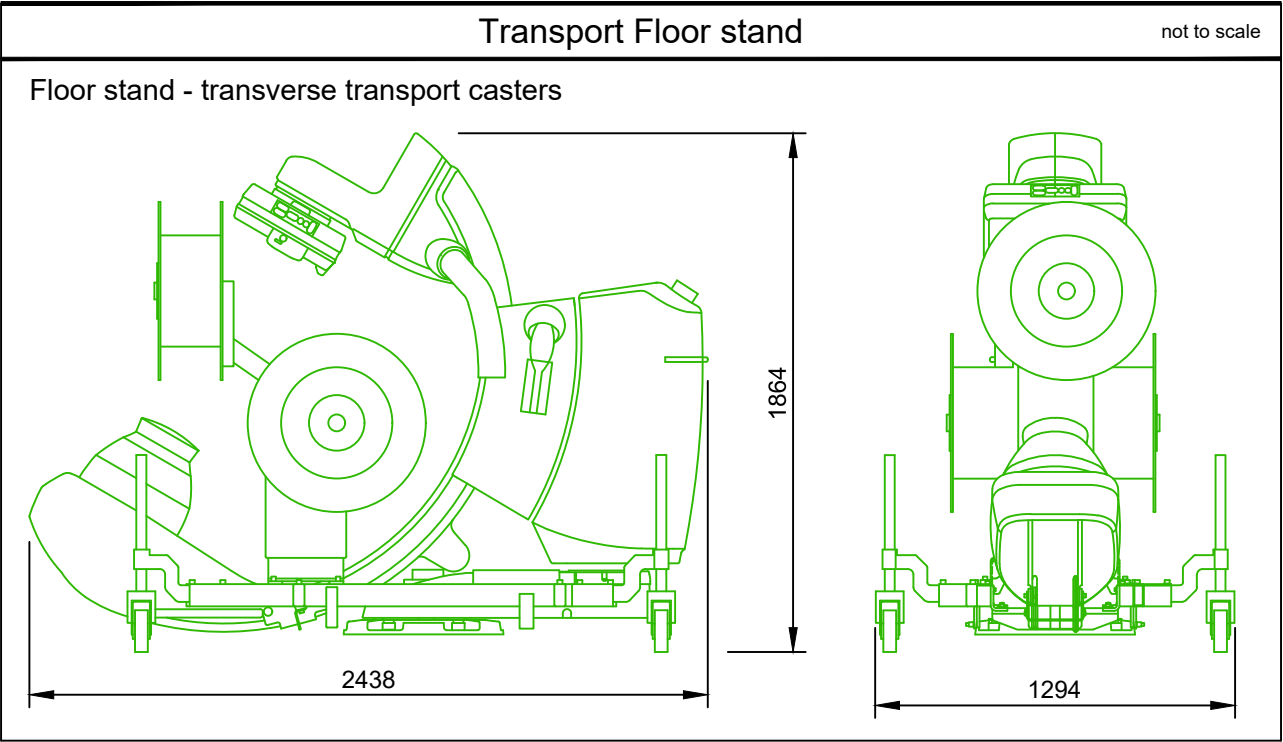


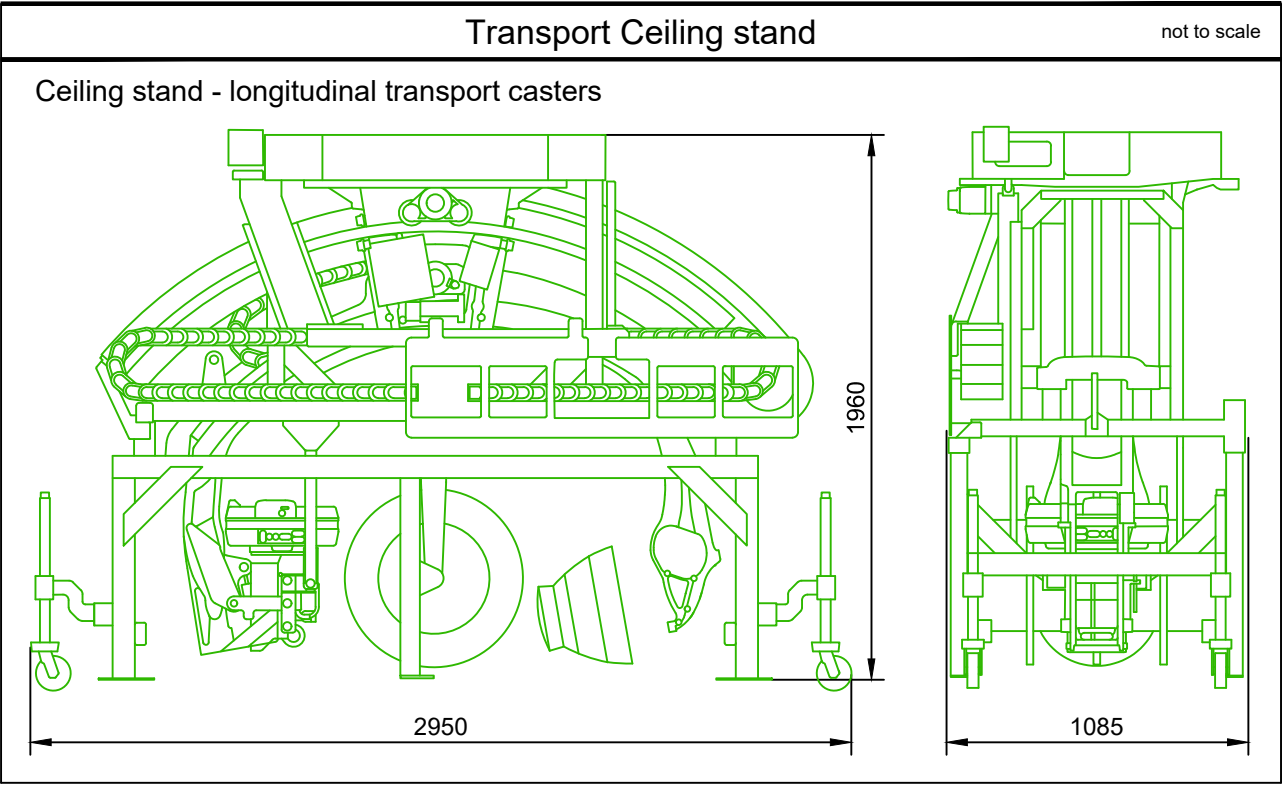
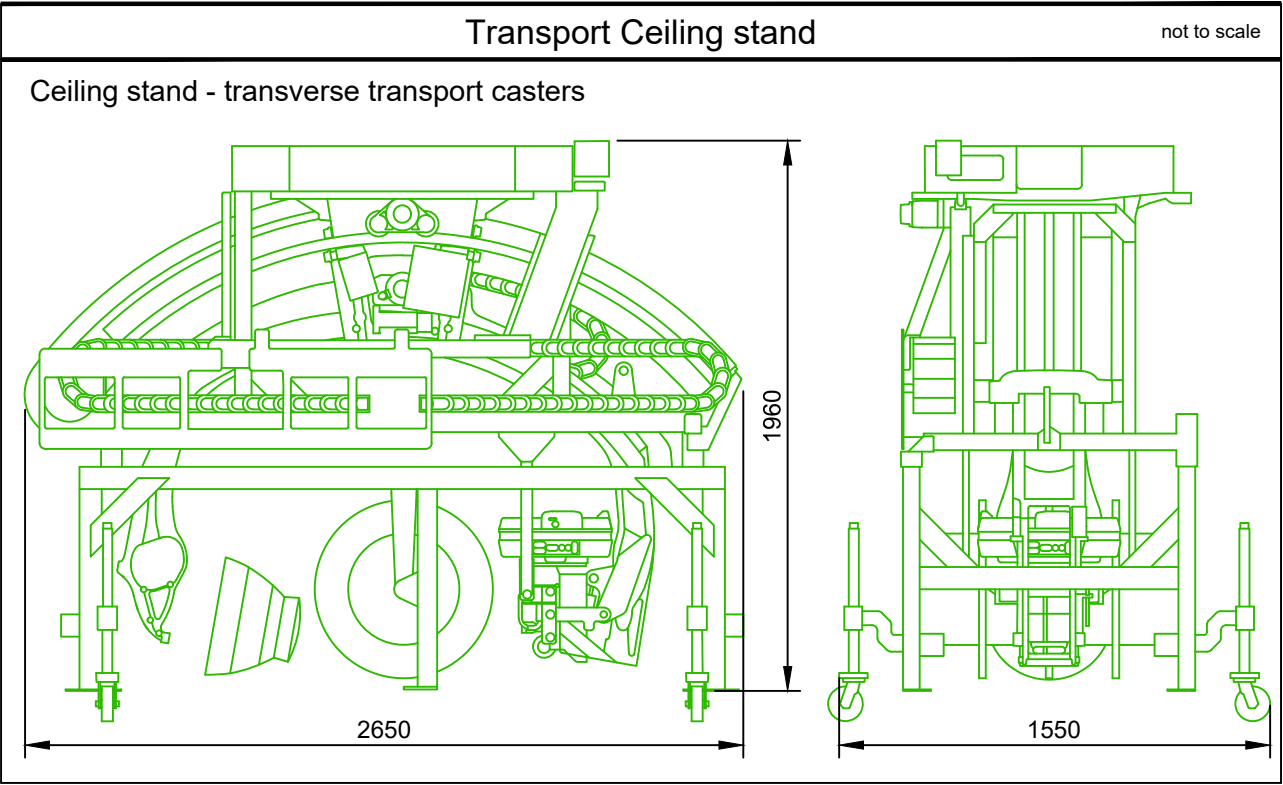
UPS - Notes

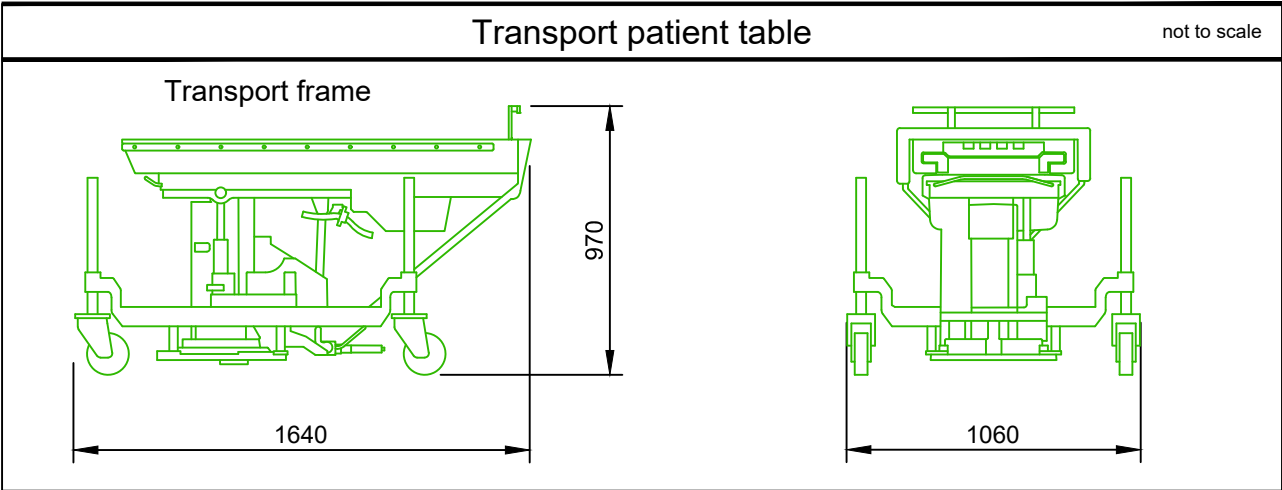
In case of a power failure no moving of the system and motorized table is possible. For all Artis systems with Artis Tilting table, Artis OR table or Artis zee Multipurpose an UPS is mandatory.

Minimum 15 kVA UPS for system and table movement e.g. Eaton Powerware 15 kVA. If customer already has an on-site Full Power UPS, this can be used, if it fulfills this requirement.

Statics and Transport







Statics

not to scale

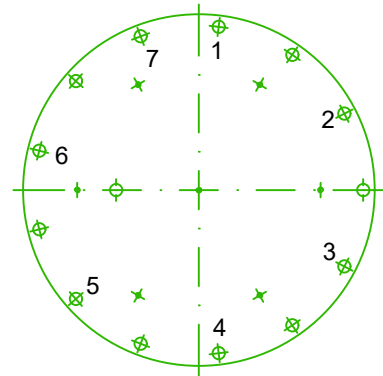
All specified load values are without safety loading.

Floor Stand

Mounting holes 1 to 7 for installation directly on the floor. The other holes are spare mounting holes.

Max. tension forces 11,2 kN at fastening points 1 to 7.

This maximum value does not appear simultaneously on all mounting points. Tensile forces depend on the operating position and on the unit movement.



Patient Table

Load on each mounting point at the table foot-end:
max. tensile force equaling 9,9 kN

Ceiling Stand

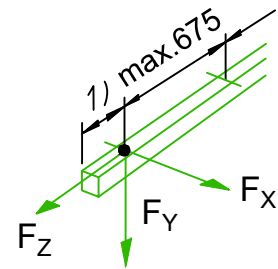
$F_{x\max}$: 2,0 kN exerted on the rail

$F_{y\max}$: 13,8 kN vertical ceiling load

(= 2 screws, the force exerted on the screws is different, max. 5,2 kN)

Since this is a single moving load the dynamic load is exerted on each mounting point.

$F_{z\max}$: 3,0 kN exerted on the rail



1) Rail overhang 120 mm to 325 mm

An on-site substructure of Unitstrut or comparable support profiles is required which must meet the following requirements:

- The bottom edge must be aligned horizontally, max. difference 0.5 mm/m.
- The longitudinal and transverse forces must be absorbed without vibration. The substructure may need to be reinforced with longitudinal or transverse bracing if applicable.
- Longitudinal or diagonal connection must be provided.
- The maximum sag of the installation ceiling must not exceed 1 mm.

Only plan ceiling-mounted lighting elements, ventilation outlets, sprinkler systems, etc. between the longitudinal rails, that are flush with the ceiling!

DCS-Stand

DCS rail mount with 55" display:

$F_{y\max}$ = 5,4 kN vertical ceiling load

(2 screws; the force exerted on the screws is different, max. 4,2 kN)

The dynamic load is exerted on each mounting point, since it is a single moving load.

DCS pivot mounted :

For installation using the **anchor plate** on a **concrete ceiling**: the max. tensile force is 3,1 kN per mounting point (assuming that only one anchor is supporting the entire load).

For installation using the **adapter plate** on a **suspended ceiling** (heavy load ceiling): the max tensile force is 2,2 kN per mounting point (assuming that only two screws are supporting the entire load).

DCS rail mount together with the ceiling stand in the longitudinal rails:

$F_{y\max}$ = 13,8 kN vertical ceiling load

(2 screws; the force exerted on the screws is different, max. 6,9 kN)

The dynamic load is exerted on each mounting point, since it is a single moving load.

Display Booms from non-Siemens Manufacturers

In case of the use of Display Booms from non-Siemens Manufacturers the static information must be requested from the manufacturer.

Environment

Environmental conditions for transport / storage	
Temperature range Relative humidity Barometric pressure	-20 to 70 °C 10 to 95 % without condensation 70 to 106 kPa
Acceleration	There must be absolute compliance with the following transport conditions to prevent damage to the system: • Maximum acceleration spectral density according to DIN EN 60721-3-2 class 2M2 - 1 m²/s³ (0.01 g²/Hz) for oscillation frequencies from 10 to 200 Hz • Maximum acceleration according to DIN EN 60721-3-2 class 2M2 Permissible peak acceleration (full shock response spectrum type I): - Horizontal shock (longitudinal / transverse): 40 m/s² (corresponds to the shunting of a train car) - Vertical shock: 100 m/s²
Note: All AT components are to be transported in the transport packaging provided by the supplier. Only vehicles with air suspension may be used for road transport of AT-systems. Only rail cars with shock absorbing bumpers may be used for rail transport of AT-systems.	

Environment		
Examination room, Control room and Equipment room	Temperature range Relative humidity Max. temperature gradient Barometric pressure	15 to 30 °C (recommended 22 °C) 20 to 75 % non-condensing 5 °C / h 70-106 kPa
Image system	Air flow rate Max. noise generation	865 m ³ / h 53 dB(A)
Generator	Air flow rate Max. noise generation	510 m ³ / h <70 dB(A)
System control cabinet	Air flow rate Max. noise generation	665 m ³ / h 55 dB(A)
Cooling unit	Cooling air Flow rate Max. noise generation	15 to 30 °C, frost-free room 4,2 l / min. 55 dB(A), 57 dB(A) at altitude > 3000m
Floor stand Ceiling stand	Shocks Vibrations Max. noise generation	max. 10 g / 16 ms max. 0,1 g / 10 bis 200 Hz <55 dB (A)
UPS 15 kVA	Temperature range Relative humidity Air change Max. noise generation	0 to 40 °C 20 to 25 °C recommended 5 to 95 % non-condensing 0,18 m ³ / h 60 dB(A)
UPS 40 kVA	Temperature range Relative humidity Air change Max. noise generation	0 to 40 °C 20 to 25 °C recommended 5 to 95 % non-condensing 0,35 m ³ / h 60 dB(A)

Electrical Installation

Electrical Data

Power line: TN-S 3/N/PE AC 50/60 Hz $\pm 1\%$, Line voltage: 400 V $\pm 10\%$
Cable cross section is to be determined by calculation!

POLYDOROS ACX/ACX_UPS (2x): Power load 34.6 kVA Line Impedance $\leq 135 \text{ m}\Omega$,

Power consumption - continuous: 14 kVA, momentary 162 kVA

Since triggering of exposure from the two generators takes place alternately in the biplane mode, the total power consumption of both generators is max. 162 kVA.

System control cabinet: Power load 19,4 kVA, Power Consumption - continuous: 16,5 kVA

Electrical Data

Power line: TN-S 3/N/PE AC 50/60 Hz $\pm 1\%$, Line voltage: 400 V $\pm 10\%$
Cable cross section is to be determined by calculation!

POLYDOROS ACX/ACX_UPS (2x): Power load 34.6 kVA Line Impedance $\leq 135 \text{ m}\Omega$,

Power consumption - continuous: 14 kVA, momentary 162 kVA

Since triggering of exposure from the two generators takes place alternately in the biplane mode, the total power consumption of both generators is max. 162 kVA.

System control cabinet: Power load 19,4 kVA, Power Consumption - continuous: 16,5 kVA

Room lighting

Ambient lighting in rooms with diagnostics or with workstations must comply with the respective local and national regulations.

General requirements like the needed intensity of illumination - adjustable, reproducible, flicker-free or a limitation of dazzlings and reflections etc. have to be observed (EN 12464-1, DIN 5035-7).

General Information

Display screen workstations

For setting up display screen workstations, take account of the guidelines in the Display Screen Workstation directive as well as any national regulations (e.g. EN ISO 9241-5).

Smart Remote Services (SRS)

Smart Remote Services (SRS) is used for remote diagnostics as well as remote service to provide highest system availability. Requirements:

- Broadband connection (minimum 10 Mbit/s down- and upstream, optimum 50 Mbit/s down- and upstream) without time or volume limitations
- The computer hosting of the Teamplay Receiver requires access to the hospital intranet and the internet. It should have a at least 6 Mbits/s upstream to the internet and at least 100 Mbits/s downstream from the internet.
- Router (for exclusive use with SRS)

Data protection and security is defined in the Smart Remote Services security concept.

Network Integration

The Siemens Healthineers components are using TCP/IP Protocol, a 100/1000 Mbit/s switched Ethernet network and static IP addresses.

The required network cabling (min. CAT 5 TP) has to be provided on site. Media converters, which are needed for using fibre optic cabling, are not in scope of delivery.

To prepare the implementation of the new system into the existing network environment, the availability of the needed network data at least two weeks before starting the installation is mandatory.

This is the only way to ensure a seamless integration of the new system into the workflow of the department.

Notes on preparations for installation

Contracts for performing and supervising on-site installation preparations should be concluded with technically competent companies by the customer. The customer is responsible for timely and proper completion and supervision of all preparations for installation at the construction site in observance of all applicable legal regulations (e.g. X-ray regulations, radiation protection regulations) and all applicable general recognized rules of technology (e.g. VDE regulations, DIN standards).

Execution and supervision of installation preparations at the construction site and later observance of the standard operating conditions are not included in our duties. The customer is responsible for checking the static calculations and, where applicable, the air conditioning in the building to be equipped.

Safety distances

Distances from moving parts of the medical device to walls, furniture and other equipment have to be kept to avoid injuries by crushing in compliance with local regulations, e.g. a minimum distance of 50 cm according to DIN EN ISO 13854.

It is the customer's responsibility to ensure the above requirements are followed. This is to avoid the risk of injury.

Radiation protection

The structural radiation protection depends on the location of the unit and the function of the surrounding rooms. By order, the planning departments of Siemens Healthineers prepare radiation protection calculation and radiation protection plan.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and are subject to change without prior notice. Some/all of the features and products described herein may not be available in the United States.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases.

The statements by Siemens' customers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results. The customers cited are employed by an institution that might provide Siemens product reference services, R&D collaboration or other relationship for compensation pursuant to a written agreement.

Siemens reserves the right to modify the design, packaging, specifications, and options described herein without prior notice. Please contact your local Siemens sales representative for the most current information.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

Not all features shown in this brochure are necessarily standard and available in all countries.

Christina
Tsoukala

Digitally signed by Christina
Tsoukala
DN: cn=Christina Tsoukala, c=GR
Date: 2026.01.15 11:39:37
+02'00'

Ioannis
Giannopoulos

Digitally signed by Ioannis
Giannopoulos
DN: cn=Ioannis
Giannopoulos, c=GR
Date: 2026.01.15 11:15:44
+02'00'

Published by
Siemens Healthineers AG
SHS ES FD

Siemens Healthineers Headquarters
Siemens Healthineers AG
Siemensstr. 3
91301 Forchheim, Germany
Phone: +49 9191 180
siemens-healthineers.com