

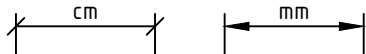



LUMINOS Lotus Max

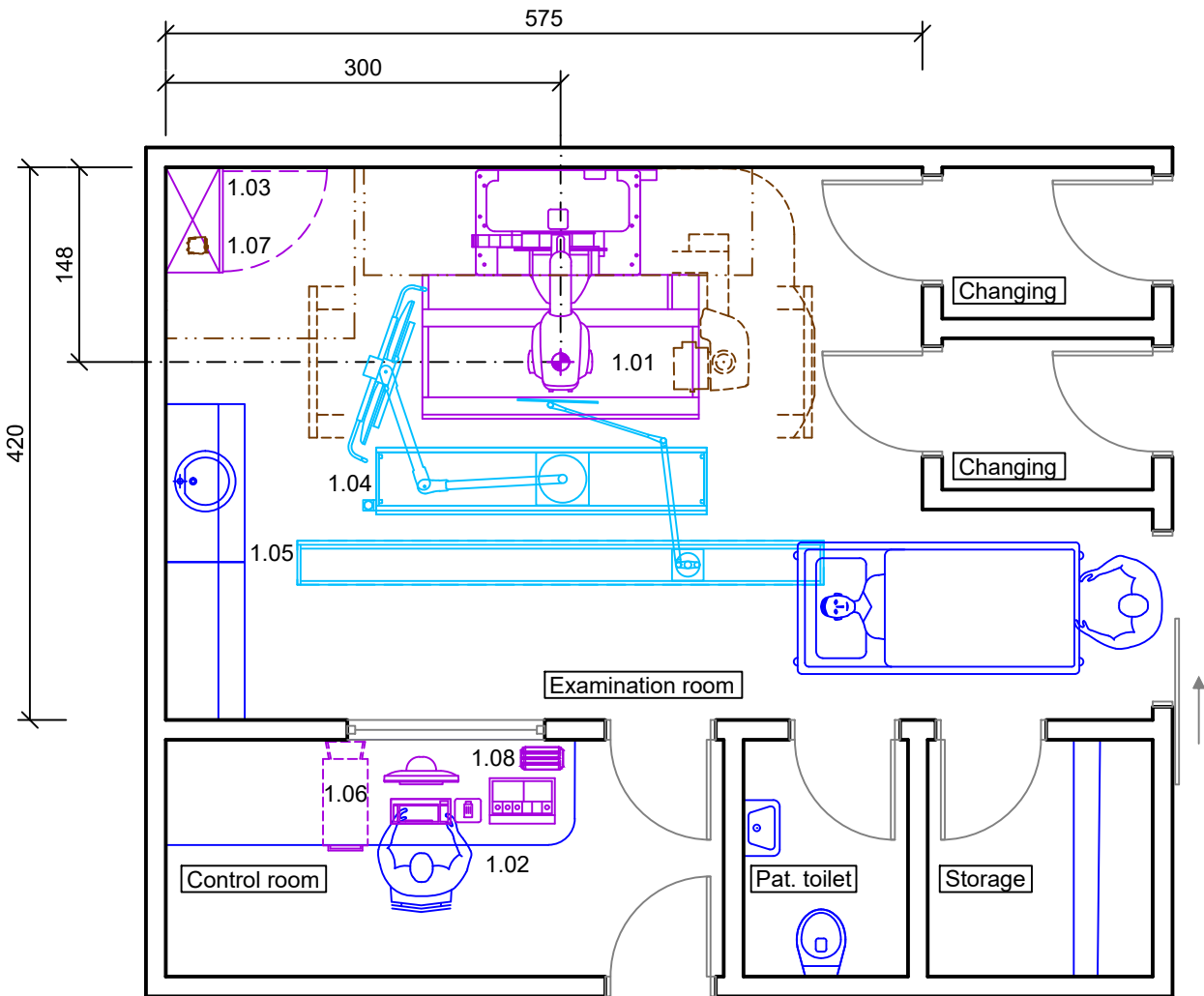
Basic Planning Information

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

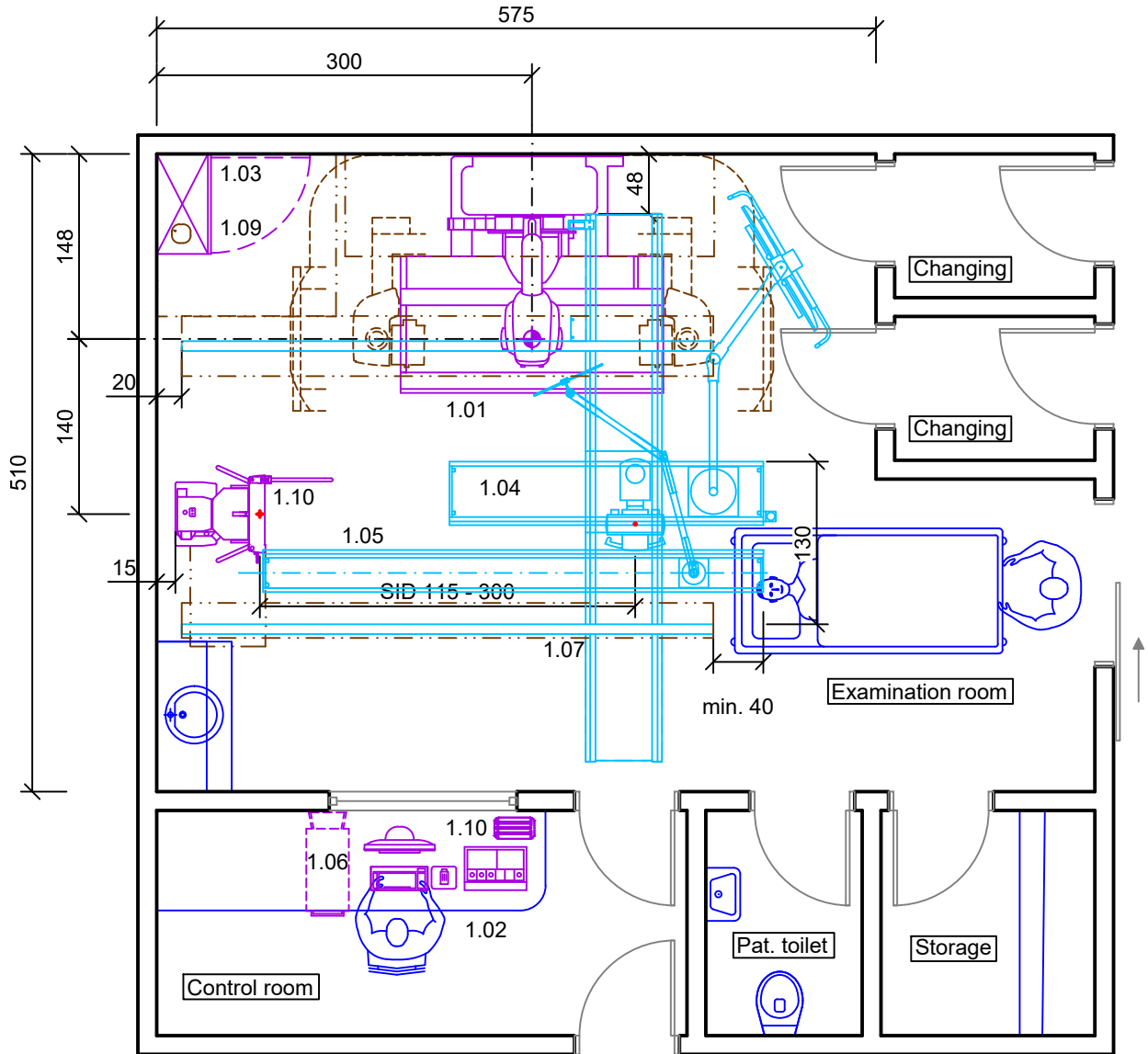
Dimensioning
All installation measurements apply to finished wall/floor/ceiling and are to be checked prior to assembling the unit.

 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



LUMINOS Lotus Max - Equipment Legend

Pos.	Description	Weight (kg), Heat dissipation to the air (W)		
		kg	W	Remark
1.01	Luminos Lotus Max	1320	800	
1.02	Control console for unit, generator and image system	5	10	
1.03	Generator Polydoros F80-2 (65 kW)	380	600	350 W standby
1.04	DCS 2	92	150	optional
1.05	Upper body radiation shield, moveable	71		optional
1.06	FLUOROSPOT Compact Container, Keyboard and Monitor	50	430	
1.07	Access Point	1,7	16	optional
1.08	Detector batterie charger	2		optional



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1.03	Generator Polydoros F80-2 (65 kW)	380	600	350 W standby
1.04	DCS 2	92	150	optional
1.05	Upper body radiation shield, moveable	71		optional
1.06	FLUOROSPOT Compact Container, Keyboard and Monitor	50	430	
1.07	Ceiling-mounted stand 4 m transverse bridge synchronized	370	250	optional, 40 W Standby
1.08	Bucky wall unit for MAX wi-D	280	240	optional, 10 W standby
1.09	Access Point	1,7	16	optional
1.10	Detector batterie charger	2		optional

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
<p>Room height (RH) Measured from the highest point of the finished floor (with covering) to the lowest point of the ceiling.</p>		
Minimum room height (1), (2)	2500 mm	
Exposures of patient foot, by standing patient with SmartOrtho function possible [-90°]	2890 [2690] mm	
<p>(1) Exposures are possible with SID 150, table 0°, only on a table height of < 650 mm Exposures are possible with SID 115, table 0° without restriction (500 - 1000 mm).</p>		
<p>(2) Table turning movement restricted on table position.</p>		

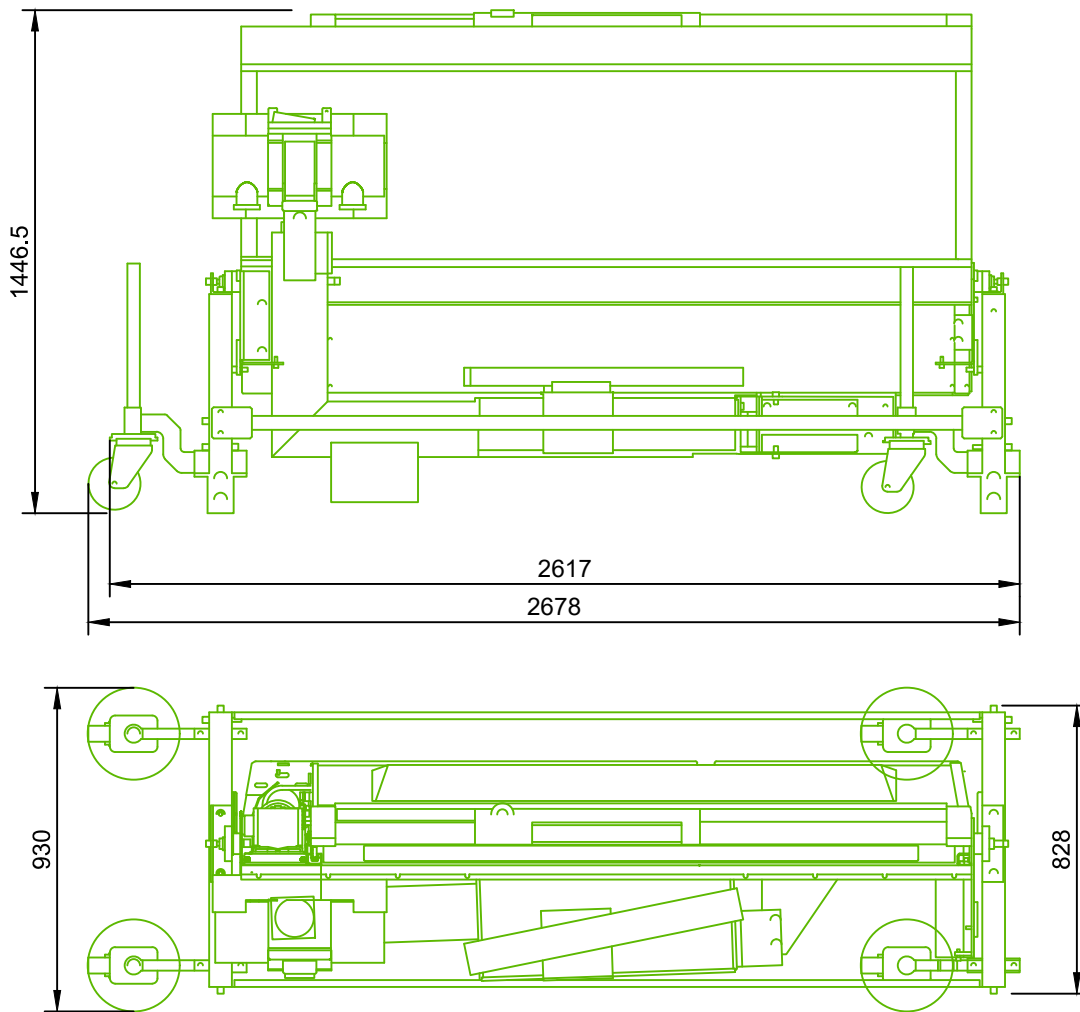
Room height		not to scale
Room height (RH) Measured from the highest point of the finished floor (with covering) to the lowest point of the ceiling.		
Minimum room height	2620 mm	
Max. room height without the telescope extension	2885 mm (*1)	
	3020 mm (*2)	
Max. room height with the telescope extension	3085 mm (*1)	
	3220 mm (*2)	
(*1) Exposures are possible horizontally onto the wall stand at 0° in the lowest position (*2) Exposures are <u>not</u> possible horizontally onto the wall stand at 0° in the lowest position		
Exposures of patient foot, by standing patient with SmartOrtho function possible [-90°]	2970 [2770] mm	

Statics and Transport

Statics
The system has to be installed on a solid surface with sufficient load carrying capacity, such as, e.g. concrete. If the underground, e.g. screed, doesn't have a sufficient bearing load, it must be removed and replaced by a concrete replenishment min. C20/25 (approx. 160 x 110 cm). If an appropriate substructure is provided on site, the unit may also be mounted on access floor. Maximum compressive force = 5 kN, maximum tractive force = 1 kN

Transport		not to scale
Largest crate	L 2460 x W 1520 x H 1420 mm	
Heaviest single part	approx. 1100 kg with packaging approx. 850 kg without packaging	
Largest single part without packaging	L 2373 x W 828 x H 1446,5 mm (all transport castors inside) L 2678 x W 828 x H 1446,5 mm (2 transport castors concealed inside) L 2921,5 x W 828 x H 1446,5 mm (all transport castors outside)	
3m cross carriage (optional)	L 3200 x B 800 x H 250 mm	
4m cross carriage (optional)	L 4400 x B 800 x H 250 mm	
Minimum door width	845 mm	
Minimum dimensions elevator	L 2950 x W 845 x H 1500 mm	
The door must have a final clearance of 1250 mm if bed entrance is requested.		

Transport Frame



Environmental conditions

Environmental conditions			
	Operation	Transport	Storage
Temperature	15 to 35 °C	-20 to 55 °C	-20 to 55 °C
Relative humidity (no condensation)	20 to 75 %	5 to 95 %	5 to 95 %
Air pressure	70 to 106 kPa	50 to 106 kPa	50 to 106 kPa

Environmental conditions			
	Operation	Transport	Storage
Temperature	15 to 28 °C	-20 to 55 °C	-20 to 55 °C
Relative humidity (no condensation)	20 to 75 %	5 to 95 %	5 to 95 %
Air pressure	70 to 106 kPa	50 to 106 kPa	50 to 106 kPa

Electrical Installation

Power requirements for generator 65 kW				
Power Line:	3/N/PE AC, 50/60 Hz \pm 1 Hz	Connection Value	34.6 kVA	
Line Voltage:	400 V \pm 10 %	Power Consumption:		
Line Impedance:	\leq 170 m Ω		Radiography	110 kVA
Cable cross section to be determined by calculation, min. 16 mm ²			Fluoroscopy	2,5 kVA
Do not connect external components to the power line !				

Power requirements for generator 80 kW				
Power Line:	3/N/PE AC, 50/60 Hz \pm 1 Hz	Connection Value	34,6 kVA	
Line Voltage:	400 V \pm 10 %	Power Consumption:		
Line Impedance:	\leq 110 m Ω		Radiography	126 kVA
Cable cross section to be determined by calculation, min. 16 mm ²			Fluoroscopy	2,5 kVA
Do not connect external components to the power line !				

Room lighting
<p>Ambient lighting in rooms with diagnostics or with workstations must comply with the respective local and national regulations.</p> <p>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).</p>

General Information

Notes to Wireless Detector

Operation of the mobile detector can be disturbed by other WLAN devices in the vicinity of the installation. To prevent this during the planning phase, it is necessary to inquire about the installation environment regarding any existing WLAN devices.

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 Teampay 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.

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).

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.

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