

LEONI ORION

Precision patient positioning system

Synchronicity with six
degrees of freedom


FDA
cleared &
CE marked

Improve throughput:
prepare patient outside
the treatment room with
tool changer

Dynamic
positioning
control

State-of-the-art
robotic couch

Sub-mm accuracy
in a large
treatment volume

Very high
payload



LEONI



Basic technical data	Mechanical Unit	Control Unit
Dimensions (L x W x H)	[1968 mm x 800 mm x 877 mm] at Zero Position	[820 mm x 510 mm x 1320 mm]
Weight	1000 kg	170 kg

Power supply connection	
Rated supply voltage	EU: 380 VAC US: 480 VAC
Mains frequency	50 Hz \pm 1 Hz or 60 Hz \pm 1 Hz
Power input	Max. 9 kW
Thermal power dissipation	790 W
Mains-side fusing	16 x 2 A slow-blowing (1 (2)x phase; 1x neutral conductor (optional))
Mains configurations	TT, TN-S, TN-C-S
Number of controlled axes	Max. 8

Cartesian Travel Range	
Lateral (isocenter at 0 mm from robot base reference)	- 2440 mm to 2440 mm, total range 4880 mm
Vertical without accessory (isocenter at 1250 mm from robot base reference)	507 mm to 1691 mm, total range 1184 mm
Vertical with QFix KView and tool changer (isocenter at 1250 mm from robot base reference)	778 mm to 1962 mm, total range 1184 mm
Longitudinal (isocenter at 1950 mm from robot base reference)	1220 mm to 3450 mm, total range 2230 mm
Top rotation ($^{\circ}$ about isocenter)	\pm 100 $^{\circ}$
Pitch and Roll ($^{\circ}$ about isocenter)	High volumes performances \pm 5 $^{\circ}$ (max \pm 15 $^{\circ}$)

Treatment volume	
Accuracy	\pm 0.5 mm (95%)
Dimensions (L x W x H)	[1000 mm* 400 mm* 500 mm]
Optimal distance robot base frame to isocenter	Long.: 1950 mm, Lat.: 0 mm, Vert.: 1250 mm
Pitch and Roll	Max. \pm 25 $^{\circ}$
Top Rotation	\pm 95 $^{\circ}$

Payload	
Safe workload with force torque sensor compensation	285 kg with couchtop
Safe workload with external tracker sensor compensation	375 kg with couchtop