

Radiotherapy Patient System „RPS extended“ – Radiotherapy Patient System for higher performance and improved patient management in Radiology Cancer Clinics and Medical Centers.



Description and essential performance features of the Radiotherapy Patient system

Up to three patients can be prepared and fixed simultaneously for radiotherapy with linear accelerator. The preparatory works take place in separate anterooms. After preparation phase, satellite arms gently transport the patients to the system where they are conveyed to the 6D unit (RPS base) of the linear accelerator.

This is where precision adjustments can be reviewed on the patient. Once radiation is completed, the patient moves back to the cabin and may leave the patient platform.

By means of its innovative concept, RPS extended both increases the number of cycles in patient treatment and the flow rate. At the same time, the treatment team can take more time for the individual patient in the preparatory room.

Intended use and intended user

The RPS extended is intended to be used for accurate patient positioning within a radiation therapy treatment environment.

It comprises of:

- The RPS extended to support and aid in positioning a patient,
- Software to control the RPS extended position.

Indications:

The intended use of the RPS extended is to support aid and control in positioning a patient during radiation therapy of various body regions. The system is not restricted to certain subpopulations (e.g., those defined by age, sex, ethnicity and organ function and disease severity or similar).

Couchtop specifications

Material	non-conductive Carbon fiber
Length	260cm / 102"
Width	53cm / 21"
Indexing system	14cm / 0.55"
Attenuation (% by 6MV)	<2,4

Additional motions

Axis	Range	Speed	Absolute positioning accuracy	Corrective positioning accuracy
Vertical movement	55 - 95cm 22" - 37"	0 - 50mm/s 0 - 2"	+/- 0.5mm (+/- 0.02")	+/- 0.1mm +/- 0.004"
Longitudinal movement	6000mm 236"	0 - 300mm/s 0 - 12"	+/- 1mm +/- 0.04"	+/- 0.2mm +/- 0.008"

Couch specifications

Maximum weight of patient	200kg (450lbs)
Hand Held Controller	Digital display absolute Motion enabeling Speed selection Home position Preset position RFID function
Remote Enable Controller	Motion enabeling
Interlocks	Touch guide HT Illegal motion Couchtop locked Motor stop

Power Supply

Mains	
(VAC)	100 – 230 ±15%
(Hz)	50 / 60
(A)	25
Internal Power	53cm / 21"
(VDC)	max. 48
(A)	max. 40