

MP3-XS Phantom Tank



Small size motorized 3D water phantom for automatic dose distribution measurement of radiation therapy beams

Features

- ▶ High precision small volume 3D water tank, especially designed for stereotactic or IORT dose distribution measurements
- ▶ 3D stainless steel moving mechanism with high speed stepper motors

The MP3-XS water tank is a small 3D phantom for remote-controlled dose distribution measurements of small radiation fields as used for example in stereotaxy or intra-operation radiation therapy IORT. The horizontal moving range is 200 mm x 200 mm and the vertical range is 300 mm. The phantom has three adjustable supports for leveling, etched crosshairs for alignment and a collision protected drain tap for emptying without tilting or changing the phantom's position.

The 20 mm thick acrylic walls and bottom do not bulge during prolonged period of use. Precision stepper motors are mounted close above the tank making it possible to adjust distances between the LINAC head and the water surface as small as 120 mm. They provide for high detector moving speed of 50 mm/s and high positioning accuracy of ± 0.1 mm. In contrast to analog drives, stepper motor drives do not require regular recalibrations. Stainless steel drive mechanics are used to minimize water perturbation and to preserve positioning accuracy during movement. They do not disturb or affect the measurement accuracy. The delivery includes a cable connection box mounted to the tank, a spirit level and an ion chamber-adjusting device. To operate the tank, MEPHYSTO software and TBA electronics are required.

Ordering Information

L981069 MP3-XS Phantom tank

- ▶ MP3-XS Configured Basic Systems *page 154*