

# PET NEMA Phantoms

## PET Phantom - NEMA/IEC 2000



*2000 NEMA Standards, ideal for whole-body PET*

- Complies with NEMA 2001 Standard
- Simulation of whole-body imaging using PET and camera-based coincidence imaging techniques
- Evaluation of reconstructed image quality in whole-body PET and camera-based coincidence imaging
- Determination of the coincidence count rate characteristics in brain and cardiac imaging
- Evaluation of the relationship between true coincidence count rate and radioactivity
- Determination of the address errors caused by address pile up
- Evaluation of the count loss correction scheme

The NEMA/IEC 2000 PET Phantom consists of a body phantom, a fillable lung insert and an insert with six various size spheres that are fillable from the outside of the phantom.

The cylindrical insert is filled with

Styrofoam beads. The user fills the chamber with liquid. It is designed in accordance with the recommendations by the International Electrotechnical Commission (IEC) and modified by the National Electrical Manufacturers Association (NEMA.) It is recommended for use in the evaluation of reconstructed image quality in whole body PET imaging.

### Specifications

- Dimensions: 9.5" h x 12" w x 9.5 depth (24.1 x 30.5 x 24.1 cm)
- Interior Length of Phantom: 180 mm
- Fillable Spheres (six) Inner Diameter: 10 mm, 13 mm, 17 mm, 22 mm, 28 mm and 37 mm
- Distance From Sphere Plane to Inside Wall: 70 mm
- Volume of Empty D Shaped Cylinder: 9.7 L  
Cylindrical Insert Dimension: O.D.: 51 mm dia x 180 mm length



PET NEMA/IEC 2001 Phantom

