

# NEMA IEC PET Body Phantom (NU 2-2018)™

Model PET/NEMA-IEC-BODY/P

#### **Main Features**

- The NEMA IEC PET Body Phantom Set™
   consists of a body phantom, a lung insert
   and an insert with six spheres with various
   sizes
- 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
- Spheres are fillable from outside the closed cylinder

# **Main Applications**

- Simulation of whole-body imaging especially 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
- Research

## **Specifications of Main Cylinder**

All clear material: PMMA
Exterior length: ~ 217 mm
Interior length: ~ 193 mm
Interior anteroposterior: ~ 221 mm
Interior lateral: ~ 290 mm

Wall thickness: ~ 3.2 mm Volume of empty cylinder: ~ 9.7 l



NEMA IEC PET Body Phantom (NU2 2018)™

## **Specifications of Insert and Spheres**

All clear material: PMMA
Fillable Insert outside height: ~ 203 mm
Fillable Insert inside height: ~ 185 mm
Fillable Insert outside diameter: ~ 51 mm
Fillable Insert Inside diameter: ~ 45 mm
Volume of Fillable Insert: ~ .26 liters

\*International Standard: Radionuclide imaging devices – Characteristics and test conditions – Part 1: Positron emission tomographs, International Electrotechnical Commission (IEC), 61675-1, Geneva, Switzerland, 1998.

\*\*Performance Measurements of Positron Emission Tomographs (PETS), NEMA Standards Publication NU 2-2018, National Electrical Manufacturers Association (NEMA), Washington, D.C.

#### **Shipping**

Carton: 13" x 13" x 13" Weight: 9lbs.



# **Externally Fillable Hollow Spheres**

# **Specifications**

Model No: Inner Diameter

EHS-100: 10 mm
EHS-130: 13 mm
EHS-170: 17 mm
EHS-220: 22 mm
EHS-280: 28 mm\*
EHS-370 37 mm

Distance from sphere center to mounting

surface: 70 mm ± 1 mm

## **Shipping**

Carton: 7" x 3" x 3" Weight: 1lb.

\*Purchase an extra 28 mm Sphere to make your PET/NEMA-IEC-BODY/P compliant with NEMA Standard NU 1-2018.



NEMA IEC PET Body / CT Lid with Hollow Spheres

# **Available in Convenient Sets**

## **Specifications**

Model No: Spheres included

EHS-SET6-A: 10 mm, 13 mm, 17 mm, 22 mm, 28 mm, 37 mm (For NEMA NU 2 PET Standard) EHS-SET6-B: 10 mm, 13 mm, 17 mm, (2) ea of 28 mm, 37 mm (For NEMA NU 1-2018 Gamma

Camera Standard)