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NuPET 66 Data Sheet

Cubresa's Small Animal PET scanner and Animal Handling System

The NuPET 66 system consists of an insertable Scanner, a Docking Station, a Workstation with software packages installed, quality control and calibration phantoms, MRI coils and animal handling accessories.

The Cubresa NuPET 66 systems are compatible with Siemens, Bruker, GE, MR Solutions and Agilent MRI systems, and are designed to operate at 1.5T to 9.4T MRI field strengths. The scanner and its accessories can be adapted to a wide range of MRI systems to make simultaneous PET/MRI easy and efficient.

The NuPET 66 can also operate as a stand-alone scanner when only PET imaging is required. Tabletop kits, coils, and animal handling accessories are available upon request.

Performance Features and Specifications

Parameter	Value
Axial Field of View	67 mm
Trans-axial Field of View	59 mm
NEMA NU-4 2008 Spatial Resolution Filtered Backprojection	1.3mm
Spatial Resolution – PSF (2it8ss)	0.9mm
NEMA NU-4 2008 Sensitivity	> 5.5 %
Reconstruction Speed	PSF (3 iterations, 8 subsets) – 5 minutes

Scanner

Voltage	30 VDC supplied from Docking Station
Outer Diameter	120 mm
Inner Diameter	75 mm
Weight	approx. 10 pounds
Connection to Docking Station	Copper Cable

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Docking Station

Voltage	120 VAC and 240 VAC
Power	340 Watts
Breaker or Fuse	Fuse
Dimensions	56cm (22.1”) W x 87cm (34.1”) H x 67cm (26.4”) D
Connection to NuPET Workstation	Multi-mode fiber

Standard Operating Conditions

Operating Temperature	20—35 ˚C are normal temperatures for the PET Scanner. Temperatures of 35—50 ˚C will be reached in those cases when the animal being imaged is being heated with 35—50 ˚C hot air.
RoHS	Yes
Humidity	For an operational system, the ambient relative humidity ranges from 10% to 80% with 29°C (84.2°F) maximum dew point.

Phantoms

Calibration Phantom	Fillable annulus
Quality Control Phantom	Fillable cylinder

Available Options

Image Analysis	Invicro VivoQuant packages are available
Respiratory Gating	Respiratory gating is connected to the SAI 3050 system or equivalent