

NuPET 200 Data Sheet

Cubresa’s Large Animal PET scanner and animal handling system

The NuPET 200 insert system consists of a 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 insert system is designed to be used in clinical 3T magnets, and can be easily inserted and then removed once scans are complete.

This large-bore NuPET 200 systems is designed to accommodate a variety of animals including non-human primates.

The NuPET 200 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	200 mm
Trans-axial Field of View	260 mm
NEMA NU-4 2008 Spatial Resolution – Filtered Backprojection	2.5 mm
Spatial Resolution – PSF (2it8ss)	1.7 mm
NEMA NU-4 2008 Sensitivity	> 5.5 %
Reconstruction Speed	Filtered Back Projection – 3 minutes OSMAPOSL (8 iterations, 8ss) – 5 minutes PSF (3 iterations, 8 subsets) – 5 minutes

Scanner

Voltage	30 VDC supplied from Docking Station
Insert Outer Diameter	440 mm
PET Ring Inner Diameter	320 mm
Weight	100 pounds
Connection to Docking Station	Copper Cable

Docking Station

Voltage	120 VAC and 240 VAC cable
Power	340 Watts



Breaker or Fuse	Fuse
Dimensions	56cm (22.1") W x 87cm (34.1") H x 67cm (26.4") D
Fiber Type (Connection to NuPET Workstation)	Multi-mode

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.
Docking Station Voltage	120 VAC to 240 VAC
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