

NeuroPET/CT • The World's First Portable PET/CT

System Characteristics

PET

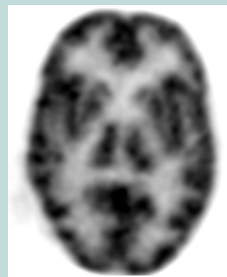
Crystal Type:	LYSO:Ce
Sensor Type:	Silicon Photomultipliers (SiPM)
Patient Aperture:	34 cm
Crystal Size:	2.3 mm, 20 mm total thickness
Point Sensitivity:	8%
NEMA Sensitivity:	14.5 cps/kBq@350keV (NEMA NU2 2007)
Resolution:	2.5 mm
NEC:	≥40kHz (NEMA NU2 2007)
Transaxial FOV:	≥256 mm
Axial FOV (crystal extent):	up to 22 cm, providing single-step head acquisition

CT

CT Detector:	8x1.25 mm detector
Maximum Technique:	140kV 7mA
Detector Channels:	3264
Max Rotational Speed:	60 RPM
Views/second:	1440
Resolution:	0.65 mm



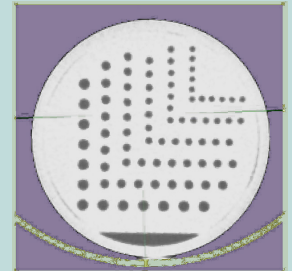
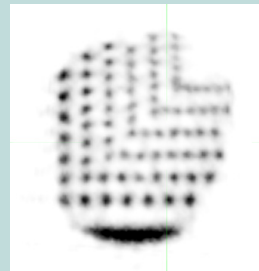
- Take scanner to patients: powered wheels, flexible power options and self-shielding.
- Patient remains stationary while scanner moves axially, allowing for more flexible patient positioning and minimal interference with patient monitors and equipment.



Hoffman Phantom

Dominoid Phantom

Right: PET
Far Right: CT
Spot Sizes:
2.4, 2.7, 3.2, 3.5, 3.9, 4.7 mm



Versatile Power Options

Battery-powered scans
Portable use with 120V, 20A service
Fixed installation uses 240V, 20A service
Input: 100-240V, 50/60Hz

Portability

Fits through a standard door
Powered transport wheels
Self-shielded CT
21 inch laptop console

Rebinning

Single Slice Rebinning (SSRB)
Fourier Rebinning (FORE)

Acquisition

Step-and-shoot PET acquisition
List mode acquisition is standard

Reconstruction

Filtered Back Projection (FBP)
2-D MLEM/OSEM
3-D MLEM/OSEM-MAP

Acquisition/Reconstruction

Computer

Processor: 2 x Intel Xeon 6-Core
Memory: up to 144 GB RAM
GPU Enhanced Reconstruction engine
Ethernet Data Receivers

DICOM Compatibility

This device is available for research use only until pre-market clearance from the FDA.

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