

X-ray Computed Tomography Fast Reconstruction Appliance

Specifications:

Must be fully compatible with Northstar Imaging X-ray CT system and Projection Images.

Must result in identical reconstructed images to current Northstar Imaging X-ray CT system.

Technical hardware specifications should include what is shown below or the equivalent of this:

efX-CT Workstation Premium 4G XTreme

- Windows® Based
- Dual Quad-Core Processor (Total 8 CPUs)
- 64GB RAM
- 12 TB Hard Drive with High Speed Raid 5 capabilities
- 4 GPU Tesla Supercomputer, including:
 - o 1792 total processing cores
 - o 24 GB of GPU Memory
 - o 3D Rendering capabilities
- 30” high resolution flat panel monitor

Nvidia 4 GPU supercomputer with a total of 1792 processing cores and 24 GB of memory.

Performance specifications include:

Input Radiographs		Reconstruction Resolution		4G Xtreme	
Number of projections	Resolution of projections	Size (voxels)	Size (disc space)	Reconstruction time	Ratio vs. CPU processor
360	512x512	512x512x512	512 MB	6s300ms	x160
360	1024x1024	1024x1024x1024	4 GB	30s	x256
720	1536x1920	1024x1024x1024	4 GB	1m23s	x130
1440	1536x1920	1500x1500x1500	12,6 GB	4m37s	x400
2880	1536x1920	3000x3000x3000	100,6 GB	58m10s	x400
2880	1536x1920	6000x6000x6000	804,6 GB	5h55	N/A