

# PHILIPS MX 8000 DUAL

## Technical Specifications

<b>Scan time</b>	0.3* (240 degrees), 0.42**, 0.5*, 0.75, 1, 1.5 & 2 seconds
<b>Spiral on-time</b>	Dual: 60 seconds continuous, 100 seconds (optional)
<b>Spiral pitches</b>	Dual: 0.375 to 2.0
<b>Slice thickness</b>	Dual/Quad: 0.5*, 1.0, 2.5, 5, 8 & 10mm
<b>Scan angle</b>	200, 240, 360, 420 degrees
<b>Scan plane</b>	Gantry tilt range of $\pm 30$ degrees
<b>Pilot</b>	Up to 1,500mm scan length, 500mm scan width
<b>Image processing</b>	2,320 views/revolution/element Reconstruction matrices of 340 <sub>2</sub> , 512 <sub>2</sub> , 768 <sub>2</sub> * & 1,024 <sub>2</sub> *
<b>System color monitor</b>	21 inch, 1,280 x 1,024, high resolution
<b>CT number range</b>	-1,000 to +3,096 Hounsfield units
<b>Host Computer</b>	Dual/Quad: Silicon Graphics® RISC host computer with UNIX multitasking graphic interface, SGI R5000 RISC processor at 300 MHz Hard drive: 9GB SCSI Optional EOD write to 4.1 or 2.3GB. Read from 4.1, 2.3 or 1.2GB
<b>Reconstruction Processor</b>	Dual/Quad: 1.9 GIPS (giga instructions per second) fast array processor 1GB* RAM memory (512 MB standard) 36GB fast disk array for scan data
<b>Reconstruction time</b>	Dual/Quad: 2 images/second: optional, image/second standard for 512 <sub>2</sub> images
<b>Spatial resolution</b>	24.0 Lp/cm in ultrahigh mode, at 2% MTF
<b>Low contrast resolution</b>	4.0mm at 0.3% with 27mGy (20cm CATPHAN phantom)
<b>Noise</b>	Dual: 0.27%, 27 mGy as measured on a 21.6cm water equivalent phantom
<b>Generator</b>	Dual: 48 kW standard, mA selections from 28 to 400 in 1 mA increments.
<b>X-ray tube</b>	during scan Maximum heat anode storage: 6.5 M.H.U. Maximum anode cooling rate: 730 k.H.U./minute. Dual focal spot: 0.5mm x 0.7mm
<b>Detectors</b>	Dual: 1,342 elements in two distinct arcs 20mm z-axis coverage
<b>Dynamic range Field of view</b>	1,000,000:1 50cm field of view (DFOV) inside 70cm aperture
<b>DICOM</b>	DICOM 3.0 hierarchical model in a DICOM 3.0 image format. Advanced database type sorting of patients and images enables fast and easy manipulation of files. 100 mB/sec network interface Mx8000 supports Service Class User, Service Class Provider, DICOM Print, Modality Worklist, Query/Retrieve, Perform Procedure Step, Storage
<b>Gantry</b>	70cm aperture Controls for gantry tilt, table elevation, stroke and swivel are 1.0 conveniently located on both sides of the gantry and on the operator console
<b>Patient support</b>	Commitment. Removable media 1,570mm scannable range, 200 kg (440 lbs.) 2.0 capacity with $\pm 0.25$ mm accuracy

**\*optional for Mx8000 Dual**