

## GE CT LightSpeed Ultra



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The LightSpeed Ultra features an innovative solid state LightSpeed Matrix detector that enables the system to simultaneously acquire multiple adjacent slices of the anatomy. LightSpeed systems provide exceptionally clear image quality, short scan times and accurate noninvasive diagnosis

### **SCAN PARAMETERS**

.5, .6, .7, .8, .9, 1, 2, 3, 4 second scans  
80,100,120,140 kVp  
10- 440 mA in 10mA increments  
.63, 1.25, 2.5, 3.75, 5, 7.5, 10 mm slice thickness 1  
second minimum interscan delay  
25, 50 cm scan fields of view 4 x 912  
No. detection channels 120 sec max  
scan time  
160 cm max scan volume

### **IMAGE RECONSTRUCTION**

Silicon Graphics Octane Computer  
.5 sec recon time per slice  
512 x 512 recon matrix

### **DATA STORAGE (STANDARD)**

18GB Hard Disk for 20,000 Images 20,000 Online  
Images  
2.3 GB MOD Archival Storage  
18GB Hard Disk for 2000, 1 sec. scan raw data files

## **DISPLAY**

(2) 21" Flat Screen monitors  
1280 x1024 Matrices, Pixels  
Up to 16 slices displayed at once

## **TABLE/GANTRY**

51-99cm vertical range  
170cm longitudinal scannable range Supports 400 lb  
patients accurately 70 cm gantry aperture  
Up to 50cm SFOV  $\pm 30$  gantry tilt

## **GENERATOR/TUBE**

53.2 kW maximum power  
6.3 MHU anode heat capacity  
840 KHU/min max anode heat dissipation rate

## **SITING REQUIREMENTS**

Minimum Suite Size: 15.5 feet wide x 19.5 feet deep x 9 feet high Recommended Suite  
Size: 19.5 feet wide x 24.5 feet deep x 9 feet high

## **SCAN PROTOCOLS**

.300 Available user selected protocols to build

## **kV, mA and Time Accuracy**

Kilovolts

kV Selections: 80, 100, 120 and 140 kV Basic kVp  
Accuracy:  $\pm 3\%$   $\pm 2\text{kV}$  Excludes first 10 msec of  
exposure

kVp during first 10 ms: Basic accuracy (see above)  $\pm 5\text{kV}$

## **MILLIAMPERES**

mA Selections

10 to 440 mA, by 10 mA increments

Patient scanning subject to scan limitations or 53.2 max mA Accuracy

Patient scanning selections of 10-440 mA Calibration scan  
selections of 10-30 mA +/- 4mA

## **EXPOSURE TIME**

Normal Axial Scan Selections: .5, .6, .7, .8, .9, 1, 2, 3 or 4 sec Cine:  
.5,.6,.7,.8,.9,1,2,3 or 4 sec

Scout: Scan range 20-1600mm at 100mm/sec Exposure  
time:0.20-16.0 sec

## **IMAGE QUALITY**

Standard Spatial Resolution:0.54 mm or 9.3 lp/ cm @ 0% High Spatial  
Resolution: 0.33 mm or 15 lp/ cm @ 0%

Low Contrast Detect ability: 5.0 mm@ 0.3% at 100mAs (18mGy)