Features of the Siemens Sensation 64

- 0.33mm isotropic resolution (standard)
- 0.24mm isotropic resolution (with z-UHR option)
- Cardiac imaging rotation time of .33 seconds
- UDF detector
- Spiral artifact-free imaging
- STRATON X-ray tube technology
- z-Sharp technology
- Routine exam detection of soft plaques
- 70% reduction in radiation dose
- Sub-millimeter coverage: 87 mm/s
- Data Acquisition (slices/rotation): 64
- 0 MHU X-Ray tube: STRATON with 5 MHU/min cooling rate
- Generator peak power: 80 kW
- CARE Dose4D

Siemens' Technical Specs for the Sensation 64
Source: Siemens SOMATOM Sensation 64 Brochure

- Ultra high isotropic resolution: 0.24mm
- z-Sharp Technology: yes
- Routine isotropic resolution at any scan speed and any position within the scan field: 0.33mm
- Maximum table speed with submillimeter resolution: 87 mm/s
- Rotation Time: 64
- 0 MHU STRATON X-ray tube: yes, 5 MHU/min cooling rate
- Generator Peak Power: 80 kW High Performance
- Standard CT Clinical Engines: syngo CT.3D; CT Oncology Engine; CT Neuro Engine; CT Cardiac Engine; CT Acute Care Engine; syngo Clinical Applications; CARE Solutions
- syngo WebSpace incl. Fast Data Link: Optional

Siemens Sensation 64 Tech Specs (Technical Specifications)

General

- Configuration: Multislice helical
- # of slices: 64
- Power: 380-480 VAC, 3-phase, 63-111 kVA
- Siting Requirements: 24 m2 (floor space needed)
**X-Ray Tube (Siemens Sensation 64)**

- X-Ray Tube Anode
- Heat storage, hu (X-ray tube anode) 0.6 MHU with 5 MHU/ min heat dissipation
- Heat dissipation rate, hu/min (X-RAY TUBE) 5,0,000
- Tube cooling (X-ray tube anode) Chilled water
- Tube focal spot, mm (X-ray tube anode) 0.6 x 0.7, 0.8 x 0.8, 0.8 x 1.2

**Image Processing**

- CPU: Multiple Intel-based servers with Dual Pentium Xenon
- Scan fovs: 50 cm (Standard); 70 cm (Optional)
- Image reconstruction matrixes: 512 x 512
- DICOM 3.0 Compatible (Power Needed, VAC) Yes

**Reconstruction time**

- Per slice, sec (Reconstruction time) 0.06
- For localization scan, sec (Reconstruction time) Real time

**Display**

- Helical Scanning: Yes
- Max scan time: 100 seconds
- Max scan volume: 157 cm
- Spatial resolution: 30 lp/cm
- Pitch: 28.2-128 freely selectable
- Reconstruction time per image: 0.06 seconds
- Monitor: 18 inch LCD
- Matrixes: 1024 x 1024
- Range of ct numbers: -1,024 to +3,071
- Image enlarging scale: Yes
- Max # slices displayed simultaneously: 64 slices

**Image storage**

- Hd capacity: 446 Gigabytes
- No. online images: 260000
- Archive: CD-R, MOD
- Scoring of Coronary Artery Calcification: Yes

**Performance**
• Minimum interscan time: 0.25 seconds
• High-contrast spatial resolution 0% mtf: 30 lp/cm
• 50% mtf, lp/cm (PERFORMANCE) 15
• Low-contrast resolution, mm at % at <=4 rads: 5 mm at 0.3% at 2 rads
• Sound, % at = 2.5 rads: 0.29

Patient Table (Range of movement)

• Vertical: 48-102 cm
• Longitudinal: 200 cm
• Scanning range: 157 cm
• Max. patient weight: 200kg (440 lbs)

Generator

• Output: 80 kw
• Kvp range: 80, 100, 120, 140
• Ma range: 28 (Imaging System)

Gantry (Siemens Sensation 64)

• Geometry: Continuous rotate, low-voltage slip ring
• Detector (Scattered Light): UltraFast Ceramic with adaptive array detector
• Rows: 64
• Elements/row: 672
• # detection channels: 64 x 1,344
• Rotation times (sec 360): 0.37, 0.42, 0.5, 0.75, 1, 1.5 seconds; Optional: 0.33 seconds
• Partial: 0.25, 0.28, 0.33
• X-ray fan beam angle: 54.4 degrees
• Gantry angle: ±30 degrees
• Gantry size (height x width x depth): 199 x 89 x 222 cm
• Gantry weight: 2100 kg
• Gantry opening: 70 cm
• Scan localizer: Laser

Software/Technology for the Siemens Sensation 64

• Other Attributes: SureView; CARE Dose 4-D; HeartView CT; syngo Perfusion; CARE Vision CT fluoroscopy; CARE Bolus; syngo Osteo; syngo Dental; syngo Pulmo; syngo Image fusion (CT/MRI/PET); syngo advanced LungCare; syngo 3-D VesselView; syngo Fly Through; syngo Argus; syngo I

Typical Room Plan: Click to View
Other

- FDA Clearance: Yes
- CE Mark (MDD): Yes