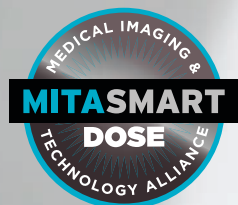


# *Supria True64* Specification Data



## Putting You On The Path of High Quality, Cost-Effective CT Scanning

Addressing the challenges of controlling healthcare organization costs effectively is at the core of Hitachi technology.

The Supria® True64 CT is the premier model within the Supria family of compact Hitachi CT Solutions – providing superb image quality, dependability, reliability and support Hitachi is known for.



With 64 channel, 40mm detector coverage and up to 128 slice reconstruction imaging capability, Supria True64 provides fast scanning coverage and thin slice capabilities without compromise.

## Solid Capabilities Are Built Into the Supria True64

Hitachi's Supria True64 CT comes equipped with a robust set of features and functions that enable lower dose and faster workflow with high quality imaging across a wide range of clinical applications.

### Supria True64 Advantages

- Meets and surpasses Smart Dose Standard XR-29
- Intelli IP Quick – Hitachi's latest powerful iterative reconstruction technology, a standard feature of Supria True64
- Compact design fits into as little as 250sq. ft.
- 40mm True 64 channel detector and DAS

### Scan Parameters

- Rotation speeds: 0.75, 1.0, 1.5, 2.0 sec.
- Data collection speed: 1,200 views per second
- Minimum slice thickness: 0.625mm
- FOV: 20-500mm
- Max scan range 71in/1800mm
- Max scan rotations: 100
- Volume scan pitch: 0.578 to 1.578

### Scan Acquisition Types

- Scanogram with real-time display: AP & Lateral
- Normal scan: Axial Mode
- Volume scan: Helical Mode
  - With or Without Orbital Synchronization
- Dynamic scan mode: Time Density Analysis

### Protocols\*

- Pre-programmed emergency
- Pre-programmed normal
- Pre-programmed user default
- Limitless user-defined, customizable protocols
- Access Controls (locked protocols, XR-26)

### Image Quality\*\*

- Spatial resolution: 17.2 lp/cm @ 0% MTF, 50mm FOV
- Contrast resolution: 2.5mm @ 0.25%, 160mm FOV

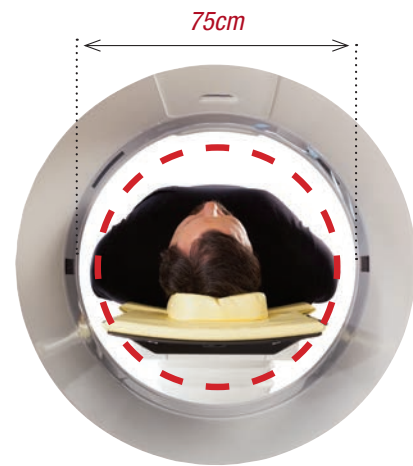
\* All Hitachi protocols provided are reviewed and optimized by HHA's Protocol Committee to ensure ALARA practices are met.

\*\* With Hitachi Performance Phantom.



# Compact Design with Enhanced Patient Access and Comfort Define the Supria True64 CT

**Supria True64**



Hitachi's patient centric design delivers on comfort and ease-of-access, culminating an optimal patient experience.

## Gantry

Enhancing positioning ease and Technologist interaction with the patient, the Supria True64 i s an information display on the Gantry face to easily control positioning and set-up functions from table-side.

- Gantry aperture: 75cm
- Gantry tilt:  $\pm 30$  degrees
- Gantry Display: Digital display of gantry tilt angle and table position
- Scan localizer: Laser marker (at preparatory position and scan position)
- Gantry, table controls: emergency stop, start/stop scan, home, preset, move to scan plane, table reset, tilt, laser alignment lights, table in/out, table up/down, collision sensor
- Foot pedal controls: home, preset
- Breathing lights
- Patient communication: intercom, auto-voice



## X-ray Detector

- Type: Solid state ceramic
- Anatomical coverage per rotation: 4cm
- Uniform detector: 64 rows x 888 elements
- Detector output: 880 elements x 64 rows

## X-ray Tube

Supria True64's X-ray tube is highly durable and provides the power needed for larger patients and long-term image quality. A tube chiller is not required, enhancing system reliability and simplifying the installation process. And interscan times are minimized with a fast tube-cooling rate – helping promote faster scanning and throughput.

- Anode heat capacity: 5.0MHU
- Anode max. cooling rate: 748kHU/min
- Tube cooling: Oil/Air
- Focal Spot (mm): 0.7 x 0.8; 1.2 x 1.4

## X-ray Generator

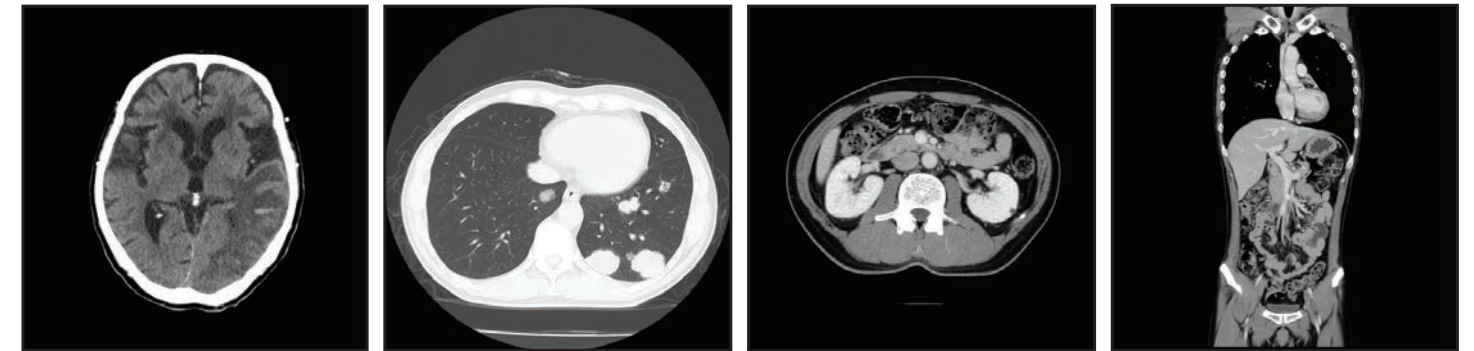
Integrated with the performance characteristics of the high-heat unit X-ray tube, the generator delivers the optimal X-ray power per protocol.

- Type: High-frequency inverter control
- Output: 48kW
- kVp selection: 80, 100, 120, 140kV
- mA selection: 10–400mA (5mA steps)
- Max tube current: 400mA ( $\leq 120$ kV), 340mA (140kV)

## Patient Table

The high-weight-capacity table accommodates a wide variety of patients without compromising patient comfort or access. And the low minimum table elevation facilitates placement of disabled and elderly patients.

- Table-top width: 19in (475mm)
- Table length: 106in (2688mm)
- Table weight capacity: 500 lbs. (227kgs)
- Horizontal accuracy:  $\pm 0.25$ mm
- Vertical travel range: 18in (450mm) to 39in (1000mm)
- Tabletop travel: from 5mm/sec to 150mm/sec
- Horizontal travel range: 75in (1910mm)



Head

Lung

Abdomen

Abdomen – Coronal

## Operator's Console

From acquisition and reconstruction through post-processing, the operating console clearly displays all the information on one monitor. For enhanced efficiency, the software team at Hitachi incorporated a quick-entry mode to minimize action steps.

- Display: single 24-inch LCD widescreen monitor
- Display resolution: 1920 x 1200
- Fully automated, interactive software platform
- Pre-programmed patient demographics and protocol selection
- Complete protocol-driven scan control
- Auto-film
- UPS for console and image processor
- Direct (CAN) contrast injector interface (option)

## Patient Registration

- Pre-registration

## Image Reconstruction

- Selectable 64 and optional FineRecon 128 slice
- Slice thickness: 0.625 –10mm
- FOV: 20 – 500mm, by 1mm steps
- Matrix: 512 x 512
- Immediate preview recon
- Image reconstruction time: up to 22 images/second (depending on recon parameters)
- Immediate image review
- CT number range: -128,768 to +128,767

## Image Display and Analysis

- Up to 1024 x 1024 Matrix
- Multi-frame layout
- WW/WL
- Magnify
- Pan
- ROI
- Image Rotation
- Measurement
- Cine
- Edge Enhancement/Smoothing
- Selectable Image Orientation

## Image Processing

- HiMAR – Metal Artifact Reduction
- Multi-Planar Reconstruction (MPR)
- Maximum Intensity Projection (MIP)
- Minimum Intensity Projection (MinIP)
- Surface Rendering
- 3D Volume Rendering
- Auto MPR, automatic MPR Processing selected from Scanogram
- MPR Spine Mode
- Exam-Split

## Network Capability

- IHE-SWF
- DICOM Modality Worklist
- DICOM MPPS
- DICOM Query/Retrieve (optional)

## Computer Processing

- OS – Windows 7 Embedded (64 bit)
- CPU – Intel Core3- 3GHz
- Main Memory – 8GB

## Storage Capacity

- Images: 110GB holds 200,000 images
- Raw data: 800GB holds >6,000 scans
- External Archive Media: CD-R and DVD-R

## Remote Service

- Sentinel™ – Hitachi's remote diagnostic tools

## TeraRecon Server Solutions

To enhance clinical applications and workflow capabilities Hitachi offers a range of optional 3D visualization solutions through a partnership with TeraRecon, Inc. which can deliver advanced clinical analysis capabilities to multiple thin-client users – simultaneously.

# Supria True64 Includes Powerful Technologies

Surpassing the feature-set required by the MITA Smart Dose Standard (XR-29), Supria True64 integrates leading edge technology that puts the focus on patient dose reduction\* and exam dose reporting.



## Automatic Exposure Control – Intelli EC

Hitachi's proprietary 3D mA modulation technology, Intelli EC automatically modulates mA to lower individual patient dose levels depending on patient anatomy and size.

## Pediatric and Adult Reference Protocols

Separate pre-loaded protocols for Pediatric and Adult patients ensures that doses are tailored to lower levels for Pediatric patients who are more dose sensitive and need the greatest attention to reducing radiation risks.

## CT Dose Check

Notifies the operator during the patient's exam protocol set-up (and adjustment) if the dose levels resulting will exceed predetermined reference dose levels. (Complies with NEMA Standard XR-25)

## DICOM Dose Structured Reporting (Dose SR)

Creates DICOM Standard format dose report for each Supria True64 patient examination and enables submission of reports to your PACS and/or national or other dose registries.

## Simple Dose Report

Provides dose reporting information as a DICOM image making it easily accessible to review dose information as part of an image series.

## Intelli IP Quick

Intelli IP Quick is Hitachi's latest proprietary processing engine that make use of adaptive iterative reconstruction processes in both projection and image space. Its use will reduce pixel noise at a given level of mAs as compared to filtered back projection without Intelli IP Quick.

## Predict Scan

Monitors contrast uptake to a user-selectable threshold value and automatically initiates the scan for optimized image contrast at a lower radiation dose and reduced injected contrast volume.

## Reduced kV Imaging

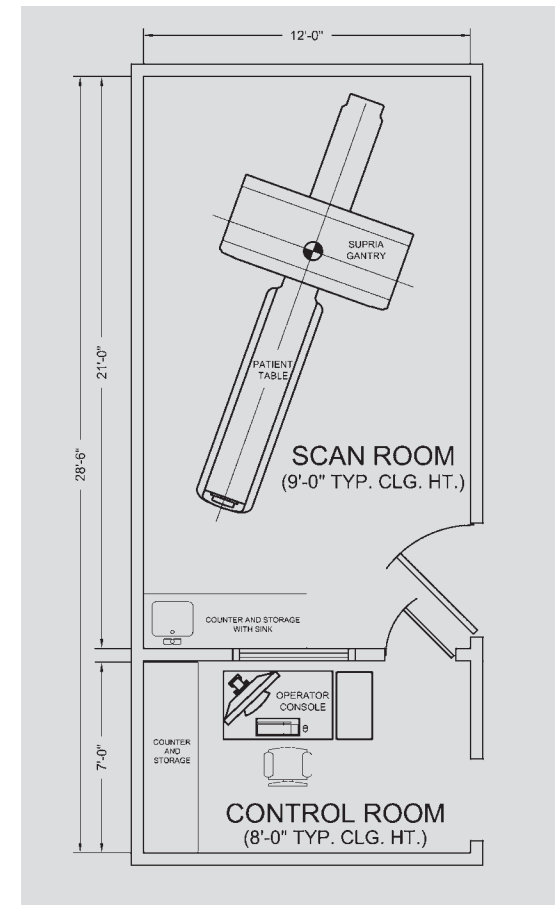
Allows selection of lowest appropriate kV for the individual patients' size – supports scanning at:

- 80kV
- 100kV
- 120kV
- 140kV

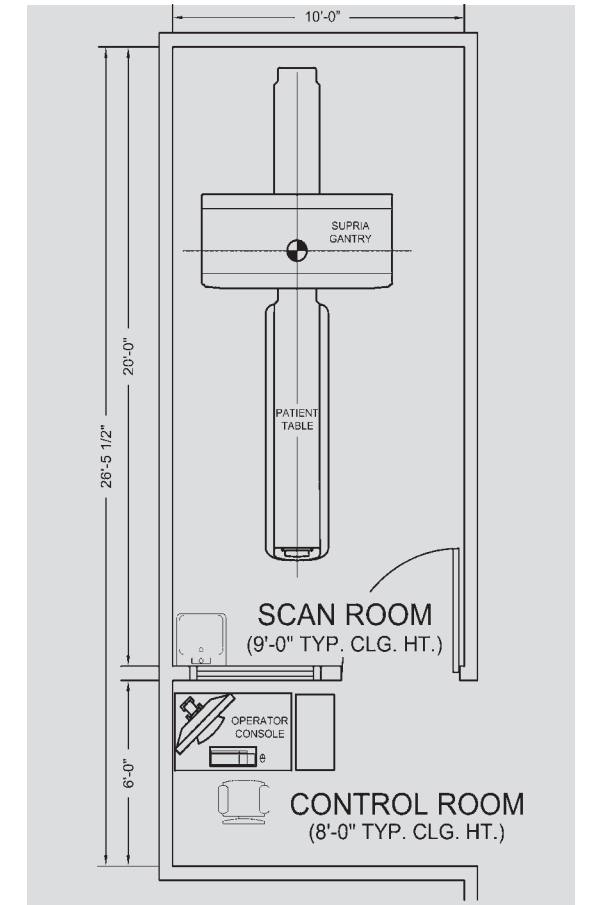


\* In clinical use, dose saving features may reduce CT patient dose depending on the clinical task, patient size, anatomical location and clinical practices employed. Consultation with a radiologist and physicist are recommended to determine the appropriate dose needed to obtain diagnostic image quality for a particular clinical task.

# Efficient and Cost Effective Siting



A Typical Floor Plan – 342 sq. ft.



A Minimum Floor Plan – 265 sq. ft.

The compact footprint of Supria True64 fits most existing rooms. So whether you are replacing a CT or expanding your imaging capabilities, Supria True64 will fit your specifications.

## Physical Specifications

	Height(mm)	Depth(mm)	Width(mm)	Weight in Kg
Gantry	1843	920	1990	1600
Patient Table	450-1000	2688	652	423
Operator's Console	660	745	400	80

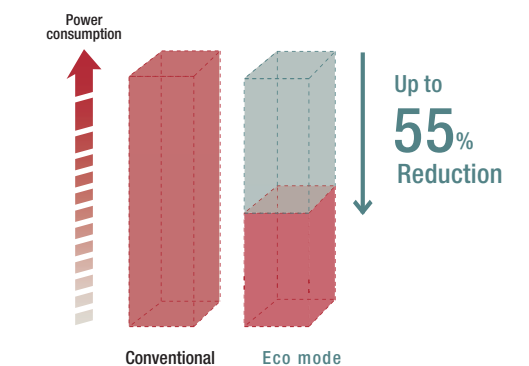
Table for monitor, keyboard and mouse supplied by HHA.

## Power and Environmental Requirements

- Voltage: 208 VAC, ±10% or less
- Main breaker: 200 AMP service
- Peak power capacity: 75kVA. Regulation 5% or less
- Input frequency: 50/60Hz
- Operating temperature: 20 – 28 degree C
- Operating humidity: 35 – 80%

## Eco-Mode Function\*\*

Stand-by mode that reduces power consumption by up to 55% during non-scanning periods.



\*\* When compared to Supria True64 without Eco-Mode.



**Hitachi Healthcare Americas**

1959 Summit Commerce Park  
Twinsburg, Ohio 44087 USA  
Tel: 330.425.1313 800.800.3106  
Fax: 330.425.1410  
[www.hitachihealthcare.com](http://www.hitachihealthcare.com)

**Hitachi, Ltd. Healthcare Business Unit**

2-16-1, Higashi-Ueno  
Taito-ku, Tokyo 110-0015, Japan

© 2017 Hitachi Healthcare Americas, Inc. All rights reserved.

2017/1500/DM#121342-V1  
Printed in U.S.A.

Hitachi reserves the right to change specifications described herein without prior notice. This document provides general technical descriptions of both optional and standard features.

Follow us on:

