HITACHI
Inspire the Next

SCENARIA™

Lower Dose with Confidence

MITASMART DOSE

MEDICAL IMAGING & TECHNOLOGY ALLIANCE
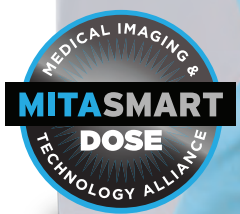
SCENARIA™

The Next Generation SCENARIA™ CT is Here.

The SCENARIA *SE* delivers lower dose technologies*, enhanced patient access, fast workflow speed and added ease-of-use in Hitachi's most advanced, scalable 64 or 128-Slice CT System.

Over 30 years of CT development and manufacturing expertise and 12,000+ CT installations worldwide come with Hitachi's next generation CT, SCENARIA *SE* Experience a higher level of clarity for routine and cardiac applications, improved iterative processing, enhanced workflow and Hitachi's latest dose reduction features.

64 or 128 Slice Capability

Enlarged 75cm Aperture

Thin Gantry Profile – 88cm

Intelli IP Advanced, Iterative Reconstruction

IntelliCenter Auto-Lateral Shifting Table, up to 16cm Range

High Capacity Table, up to 550lbs

Low Minimum Table Height of 46.5cm

Long 200cm Scannable Range

* 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.
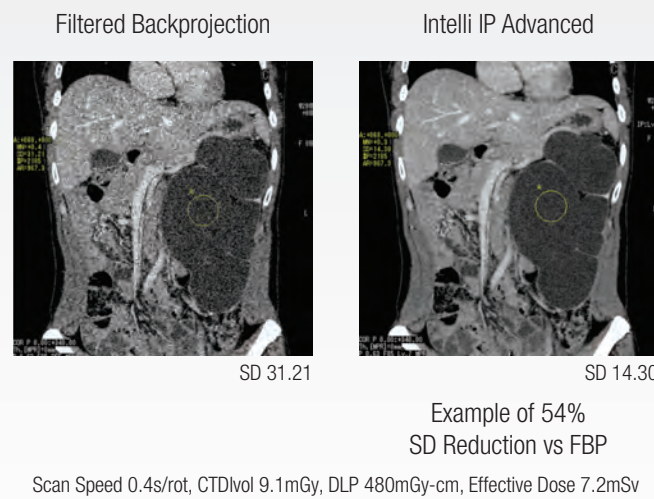
Experience SCENARIA *SE*'s Latest Capabilities.

Intelli IP and Intelli IP Advanced

Iterative reconstruction is a standard feature of every
SCENARIA *SE* system. The SCENARIA *SE* 128-slice model
is equipped with Hitachi's latest iterative reconstruction
technology, Intelli IP Advanced.

Available 128 Slice Imaging

SCENARIA *SE* is available as a 64 slice or 128 slice model for
improved multi-planar reconstruction (MPR) visualization.

PowerRecon II

PowerRecon II provides an immediate real-time preview
recon and full-quality reconstruction at up to 50 images per
second — providing the workflow speed to meet your most
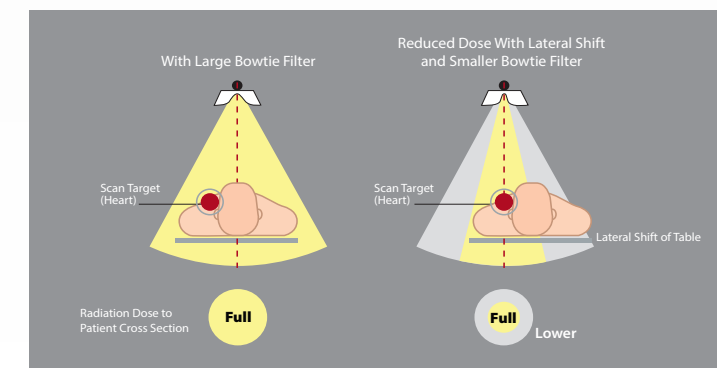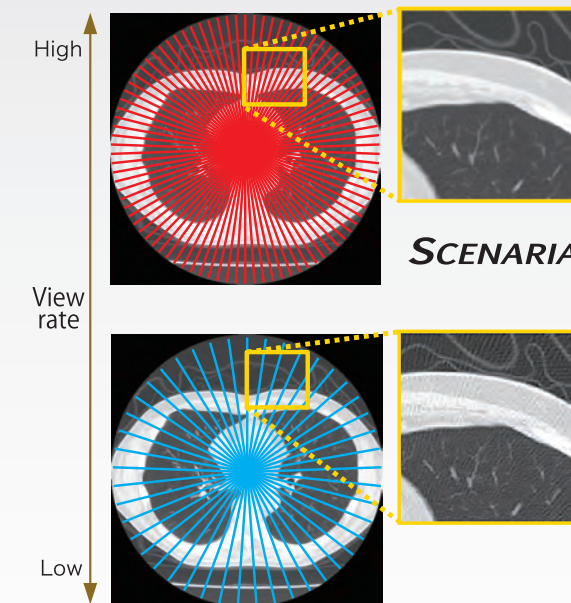challenging patient volume needs

High Weight Capacity Table

A bariatric weight table with 550 lb capacity
comes standard with the SCENARIA *SE*.

Filtered Backprojection

Intelli IP Advanced

SD 31.21

SD 14.30

Example of 54%
SD Reduction vs FBP

Scan Speed 0.4s/rot, CTDIvol 9.1mGy, DLP 480mGy-cm, Effective Dose 7.2mSv

0.35 Second Scan Speed with Higher Density Ray Sampling

With a high density view rate of 2,880 data samples per
detector element per second, the SCENARIA *SE* enhanced
data collection rate over the 360º rotation provides improved
data density on the periphery of the Field of View. Making
the shortest 0.35 second scan time available for a wide
range of abdominal and long coverage exams in addition
to cardiac exams.

This standard feature on the SCENARIA *SE* also enables
scanning at a higher pitch resulting in faster exam
coverage at a lower dose.

High

View
rate

Low

SCENARIA

With Large Bowtie Filter

Reduced Dose With Lateral Shift
and Smaller Bowtie Filter

Scan Target
(Heart)

Scan Target
(Heart)

Lateral Shift of Table

Radiation Dose to
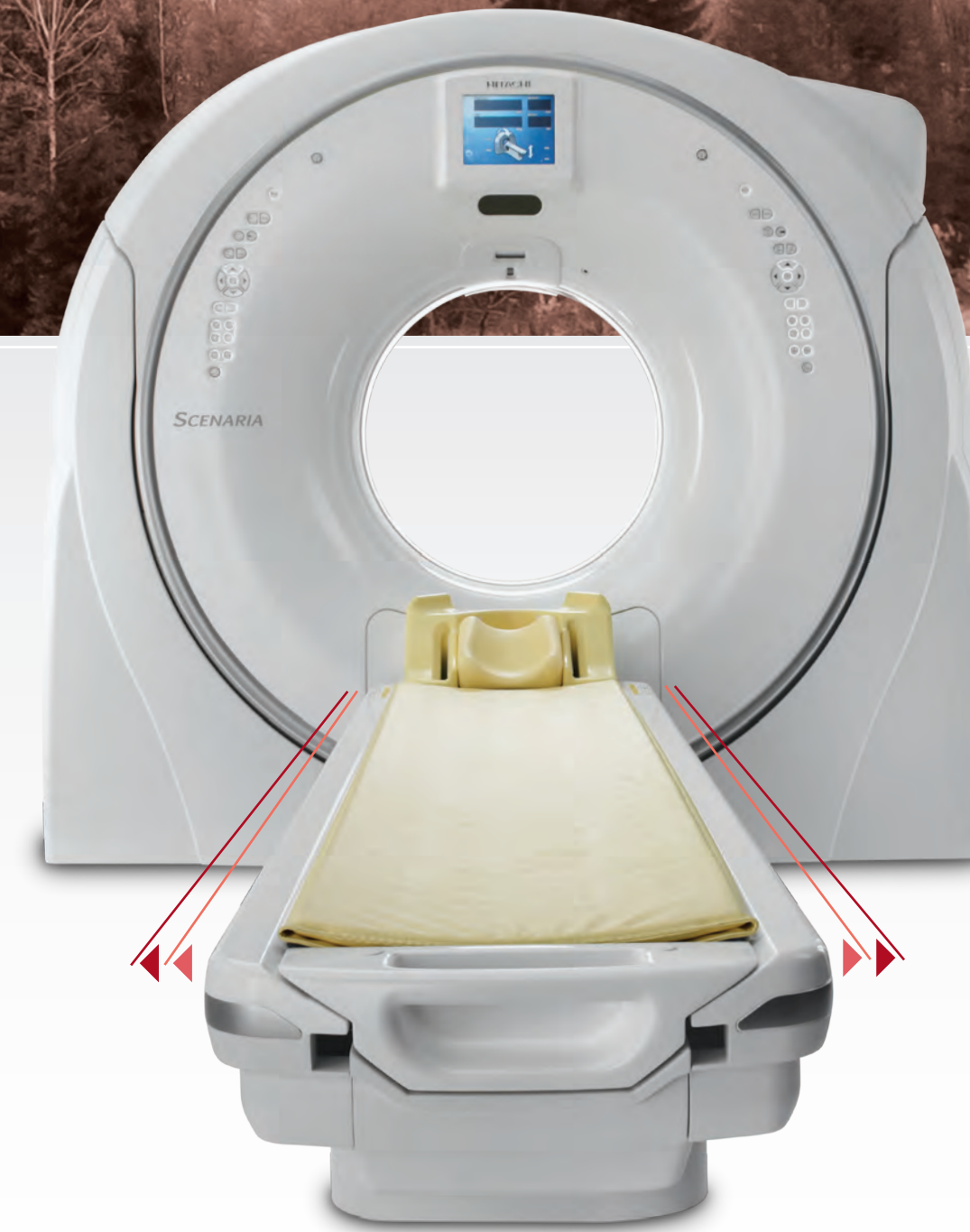Patient Cross Section

Full

Full

Lower

Larger Bowtie Filter
when larger Field of View
coverage is needed

Smaller Bowtie Filter with
Auto-Lateral Shifting
Table for smaller Field
of View coverage and
reduced dose

Auto-Lateral Shifting Table

With the SCENARIA *SE*, the task of centering the
patient laterally is simplified. Precisely center
the heart or other anatomy in the Field of View
automatically from the gantry or operator consoles.
And take advantage of improved spatial resolution
and lower dose.

An enhanced experience for the patient. And a faster, easier and more accurate path to diagnosis.

The SCENARIA *SE* Auto-Lateral Shifting Table
comes standard, allowing you to easily position
and accurately center the anatomy of choice
at the iso-center without having to physically
reposition the patient. Spatial Resolution is
improved. And dose is reduced by employing a
beam-shaping bowtie filter that narrows the beam
intensity to the iso-center of the heart or other
anatomy of interest.

The Auto-Lateral Shifting Table can also
accommodate a wide variety of patients,
including bariatric and elderly, with a weight
capacity of 550 lbs, scanning length of 200cm
and low 18in minimum table elevation.

Up to ± 8cm lateral shift from center line
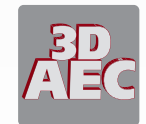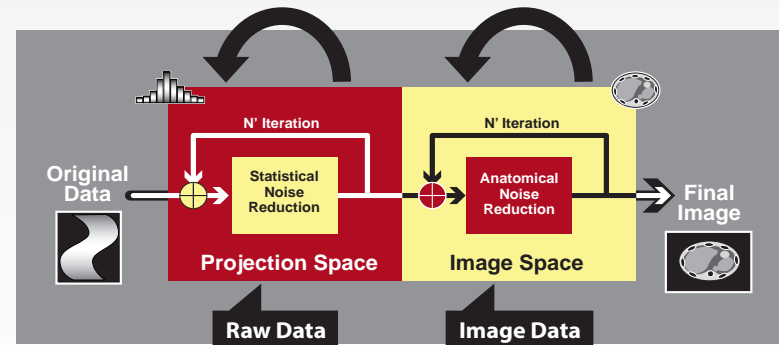
SCENARIA™

A Full Suite of Enhanced Features are Included with the SCENARIA *SE*.

SCENARIA Dose Awareness Features Provide Greater Safety to Your Patients.

CT Dose Check

DICOM Dose SR

Intelli IP and Intelli IP Advanced – Iterative Reconstruction

Intelli IP and Intelli IP Advanced are Hitachi's latest proprietary processing engines that make use of adaptive iterative reconstruction processes in both projection and image space. Their use will reduce pixel noise at a given level of mAs as compared to filtered backprojection without Intelli IP/Intelli IP Advanced.

Original Data — Statistical Noise Reduction — N' Iteration — Anatomical Noise Reduction — N' Iteration — Final Image

Projection Space — Image Space

Raw Data — Image Data

Intelli EC Plus (Automatic Exposure Control)

Intelli EC is Hitachi's proprietary 3D mA modulation technology that automatically modulates mA to lower individual patient dose levels depending on patient anatomy and size and considering the level of iterative reconstruction selected. mA modulation occurs both in the x, y plane as the tube rotates and over the patient's z-axis as the table moves. Intelli EC Plus can be set to provide real-time control of mA, to achieve a constant Noise Standard-Deviation in the resulting images.

225mA
50mA
184mA
117mA
231mA
161mA
186mA
215mA
mA

Z Modulation + X-Y Modulation = X-Y-Z Modulation
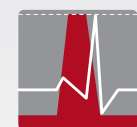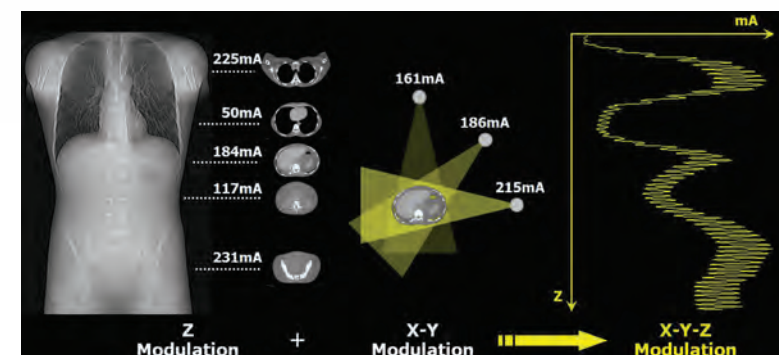
ECG Dose Modulation

Reduces mA by up to 80% during the cardiac phases of a retrospectively gated exam that are not intended for image reconstruction – reducing radiation dose.

100%
20%
Helical Scan
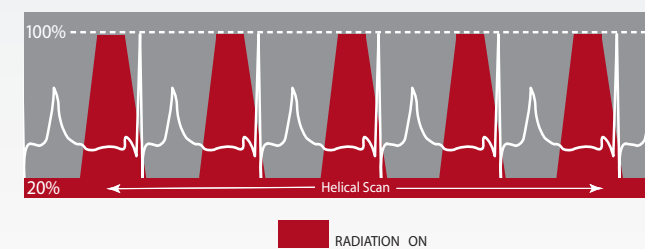
RADIATION ON

Axial Snap-Shot Imaging

Pulses the X-ray "on" only during a phase of the cardiac cycle using prospectively gated step-and-shoot cardiac scanning – reducing radiation dose.

70% R-R   70% R-R   70% R-R   70% R-R
TABLE STEP   TABLE STEP   TABLE STEP

RADIATION ON   RECONSTRUCTION PHASE
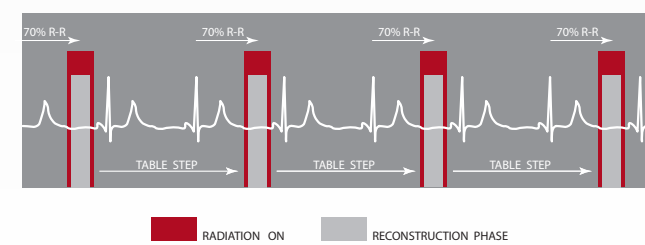
Multi-Bowtie Filters

Provide the ability to reduce radiation in areas outside the scan field of view.
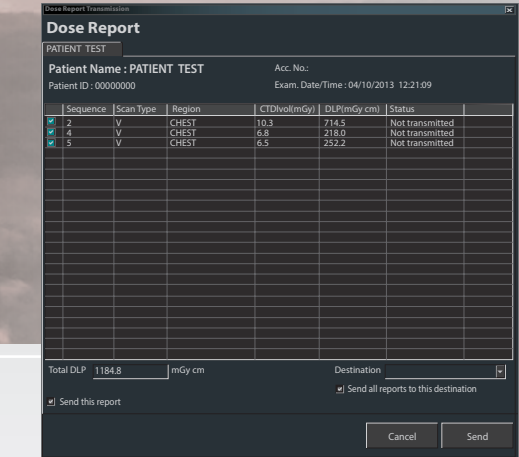
Reduced kV Imaging

Delivers the flexibility to support scanning at 80, 100, 120 or 140kVp. This SCENARIA *SE* feature can be adjusted to the lowest appropriate kV for the individual patient's size, thereby lowering the dose to the patient.
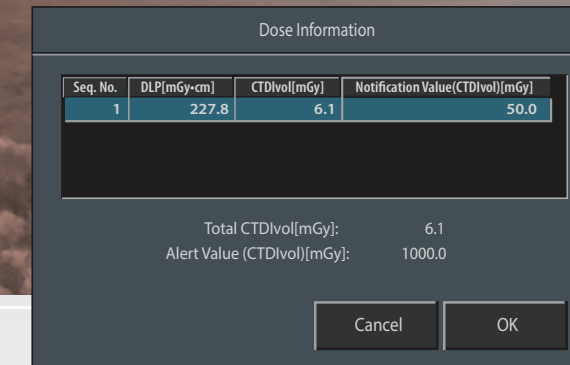
CT Dose Check

Based on predetermined reference dose levels, the SCENARIA *SE* can notify the operator during exam protocol set-up when reference dose levels will be exceeded. Thereby minimizing ordering instruction errors and unintended operator settings while assuring reasons are considered for the dose level selected before the scan begins (Per NEMA Standard XR-25 and XR-29).

Dose SR (DICOM Dose Structured Report)

Send a DICOM standardized dose report for each CT exam to your PACS / VNA and dose registries affiliated with your facility. Thus complying with dose record requirements, facilitating research and comparison of actual dose data for similar exams (Per NEMA Standard XR-29).

Simple Dose Report

The Simple Dose Report automatically creates a dose report embedded with the image series, making it easily accessible whenever and wherever the image series is viewed.

All Hitachi CT systems are designed to meet ALARA practices as well as comply with XR-29 Smart Dose standard.

MITASMART DOSE

MEDICAL IMAGING & TECHNOLOGY ALLIANCE

SCENARIA™

Simplicity, Speed and Clarity
For All Your Routine Applications.

The SCENARIA *SE* comes standard with a premium feature-set to enhance routine clinical application capabilities.

Take advantage of Hitachi's enhanced CT technologies to quickly and efficiently complete your routine applications without compromising image quality.

- Long Scan Coverage – up to six feet, five inches (200cm)

- Bariatric Weight Capacity Table – up to 550 lbs (250kg)

- Rapid 0.35 Sec. scanning that provides 2,880 data samples per detector element per second

- High pitch scanning (up to 1.578) to help reduce patient dose and promote shorter exam times

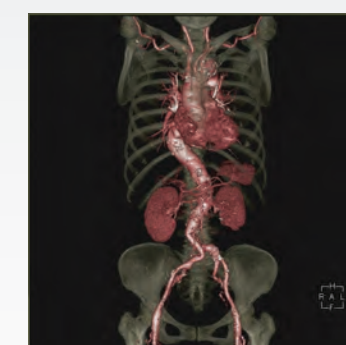- Thin 0.625mm slice thickness with 40mm coverage per rotation
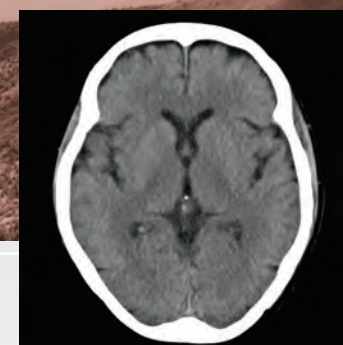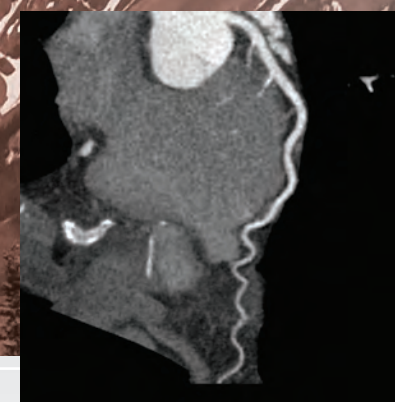
Neuro

Chest
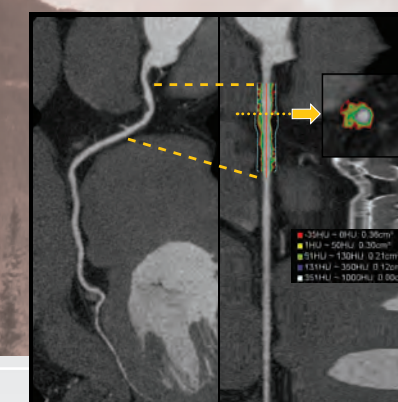
Abdomen/Liver

CT Angio

Coronal MPR

Orthopedic

Hitachi's latest enhanced CT technologies quickly and efficiently complete your routine applications without compromising image quality.
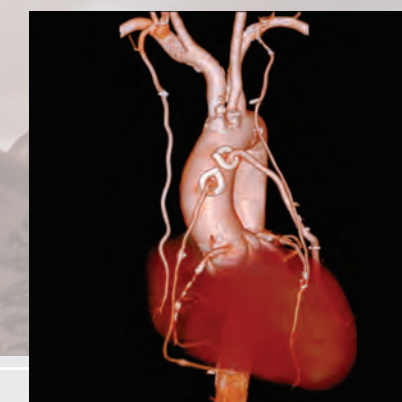
SCENARIA™

Take Advantage of an Expanded Suite of Cardiac CT Features.*
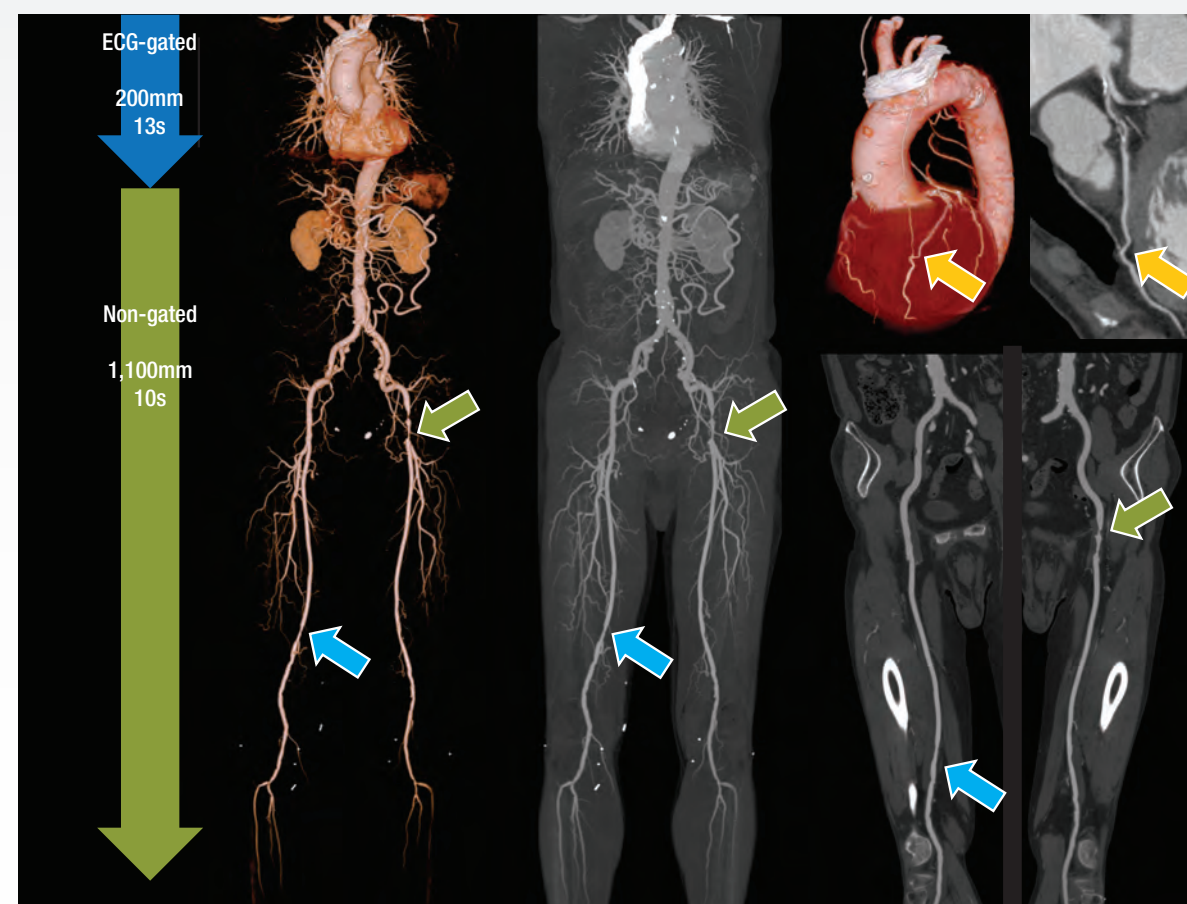

sub mSv Prospectively gated scan

RCA Plaque Analysis

Post – CABG

Combination scanning mode — single acquisition gated and non-gated scan.

ECG-gated
200mm
13s

Non-gated
1,100mm
10s

Single acquisition gated and non-gated scan enables coronary artery, aortic and peripheral vascular evaluation with one breath hold. With 0.35 second scan speed throughout, the complete 1.3 meter coverage exam time is just 23 seconds.

Provides an excellent planning tool for Transcatheter Aortic Valve Implantation and Replacement (TAVI / TAVR).

*Cardiac package is optional.

Dependably capture clear, concise information of the heart, over a wide range of heart irregularities.
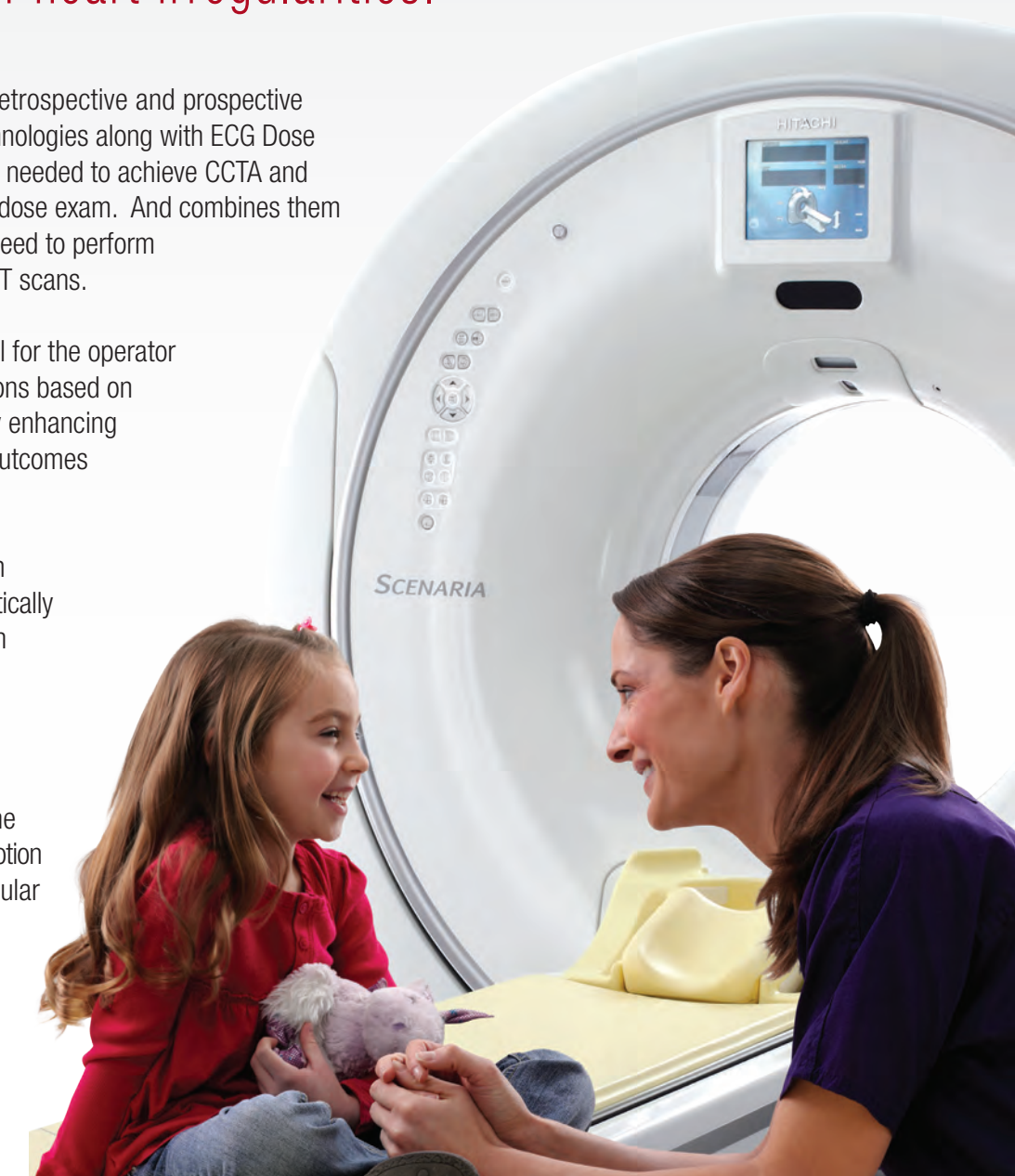
SCENARIA *SE* incorporates the latest retrospective and prospective (Snap-shot) ECG Gated acquisition technologies along with ECG Dose Modulation and sophisticated protocols needed to achieve CCTA and Calcium Scoring data in a single lower dose exam. And combines them with powerful, advanced features you need to perform cutting-edge 64 or 128 slice Cardiac CT scans.

Cardio Conductor is an easy-to-use tool for the operator that automates scan parameter selections based on ECG and breath hold rehearsal, thereby enhancing workflow, improving successful exam outcomes and decreasing overall exam times.
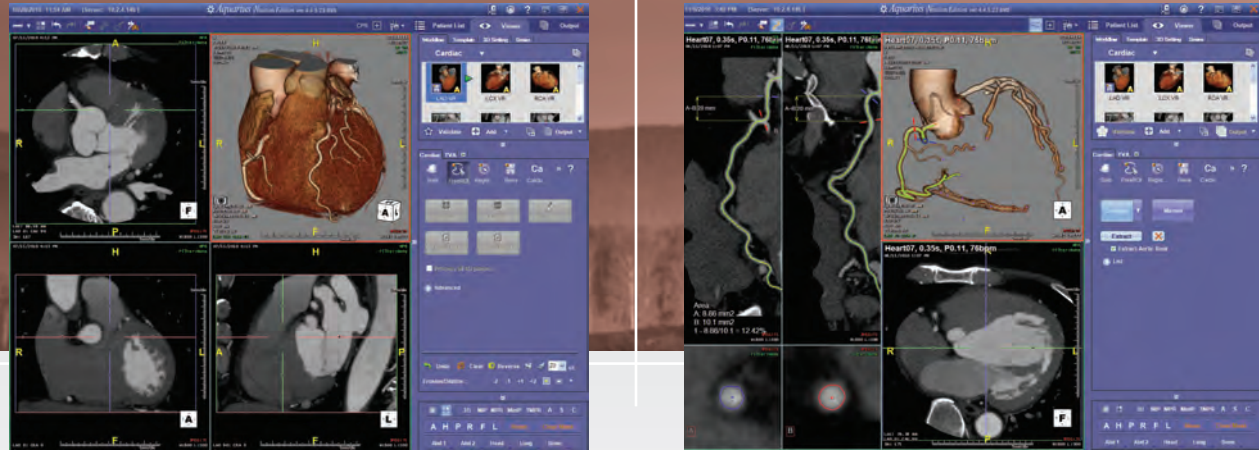
Cardio Harmony automates post-scan "best" recon phase selection by automatically analyzing image motion during the scan in 1% ECG phase increments and then recommending the phases with least motion and clearest results.

ECG Editor provides the ability to edit the acquired data after scanning, enabling motion free images even for patients with irregular heartbeats and image mis-registration.

Some Cardiac Images shown require post-processing using optional TeraRecon 3D visualization solution.

Advanced 3D Visualization and Analysis Capabilities with a Powerful Thin Client Solution.

Rapid Workflow with an Ergonomically Designed System.

Wide aperture and ultra-wide tabletop resulting in a more comfortable patient experience

75cm

47.5cm

i*N*tuition™ Server by TeraRecon provides cutting-edge rendering power, automation and versatility.

Hitachi's partnership with TeraRecon allows you to integrate innovative 3D visualization technology with the SCENARIA CT. Take advantage of industry leading 3D rendering, automation and applications with rapid clinical analysis work tools on a single system or enterprise-wide.

Hitachi's Directlink interface provides exceptional study transfer speeds by easily linking SCENARIA directly to a nearby TeraRecon 3D visualization server without the need to go through your organization's IT networks.

Whether you need a dedicated server or enterprise-wide solution, the combination of TeraRecon and Hitachi is the answer.

SCENARIA *SE* delivers ease-of-use with exceptional patient comfort.

The SCENARIA *SE* combines enhanced ergonomics with Hitachi's improved workflow processes and technologies resulting in clear image performance, diagnostic confidence and patient comfort:

- Rapid table movement (up to 200mm per sec.)
- Comfortable 47.5cm table top
- Larger 75cm aperture for easier scanning of bariatric patients
- Strategically placed bilateral operator control panels on the gantry
- Slim gantry depth of 88cm
- Programmable Direct Injector Interface
- Adult and pediatric reference protocols
- Dose awareness features
- Intuitive, easy-to-use interface delivering simplified patient registration
- Automated Cardiac CT Applications – Cardio Harmony, Cardio Conductor, ECG Dose Modulation and ECG Editing features (requires Cardiac option)

From start to finish, the SCENARIA *SE* provides exceptional comfort for the patient. And the power, flexibility and ease-of-use you need.

Outstanding Support Services
Complete Hitachi's SCENARIA Solution.

Putting Hitachi to Work For You.

Exceptional imaging systems and lifecycle value are what imaging professionals have come to expect from Hitachi. The SCENARIA CT Is no different. We will always subscribe to a commitment of success in achieving your goals while offering the highest standard of patient care.

Seamless Site Planning and Installation

With a smaller gantry/table footprint, the SCENARIA is the ideal choice for replacing your older CT with little or no reconfiguration of room space. And you can depend on your Hitachi-expert site planner to be there and guide you every step of the way.

On-site/Off-site Training

Comprehensive on-site applications training with no-charge follow up visits come standard with every Hitachi warranty and service contract. So, when you need to update the skills of your existing workforce, or train new employees, the experts at Hitachi will do the training without added financial burden to your facility. Our on-site and on-line training courses are continually revised so that the latest dose reduction strategies and best operating practices of SCENARIA are always at the forefront of your CT experience.

Sentinel™ Remote Service

Your SCENARIA warranty and service contract includes remote system diagnosis providing the ability to remotely send an image, run diagnostics, look at raw data, read error messages, monitor operating parameters and more.

98% Uptime Guarantee

Expect reliability. Your system is running 98% of covered time during every quarter or you receive additional service at no cost.*

Flexible Service Options

Every SCENARIA service contract comes with the flexibility to meet the needs and investment goals of your organization. From short-term, minimal service warranties to long-term, full-service contracts, we will see that you are taken care of from the first day to renewal and every day in between.

Marketing Assistance

Hitachi delivers comprehensive customer marketing support to help promote your facility to referring physicians and the local community. Patient Education Materials clearly differentiate SCENARIA CT from other diagnostic alternatives. And prepare patients for their CT experience. A comprehensive Marketing Planner includes press releases, photography, clinical examples, patient fact sheets and physician marketing pieces. All proven effective with Hitachi installations nationwide.

Our Promise.

With 350,000+ associates worldwide and an unparalleled commitment to excellence, Hitachi is dedicated to ensure our equipment successfully contributes to the growth and profitability of your enterprise.

* See Service Maintenance Agreement terms.
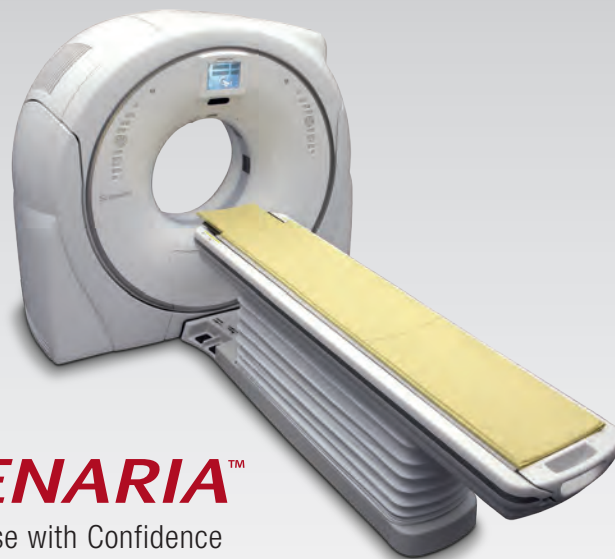
SCENARIA™

Lower Dose with Confidence

Hitachi Medical Systems America, Inc.

1959 Summit Commerce Park

Twinsburg, Ohio 44087 USA

Tel: 330.425.1313   800.800.3106

Fax: 330.425.1410

www.hitachimed.com

Hitachi Medical Corporation

4-14-1 Akihabara UDX

Soto-Kanda, Chiyoda-ku

Tokyo, 101-0021 Japan

www.hitachi-medical.co.jp

Follow us on:

LinkedIn: www.linkedin.com/company /hitachi-medical-systems-america

Twitter: @Hitachi_Health

HITACHI
Inspire the Next

© 2015 Hitachi Medical Systems America, Inc.