MEVIAN TECHNOLOGY

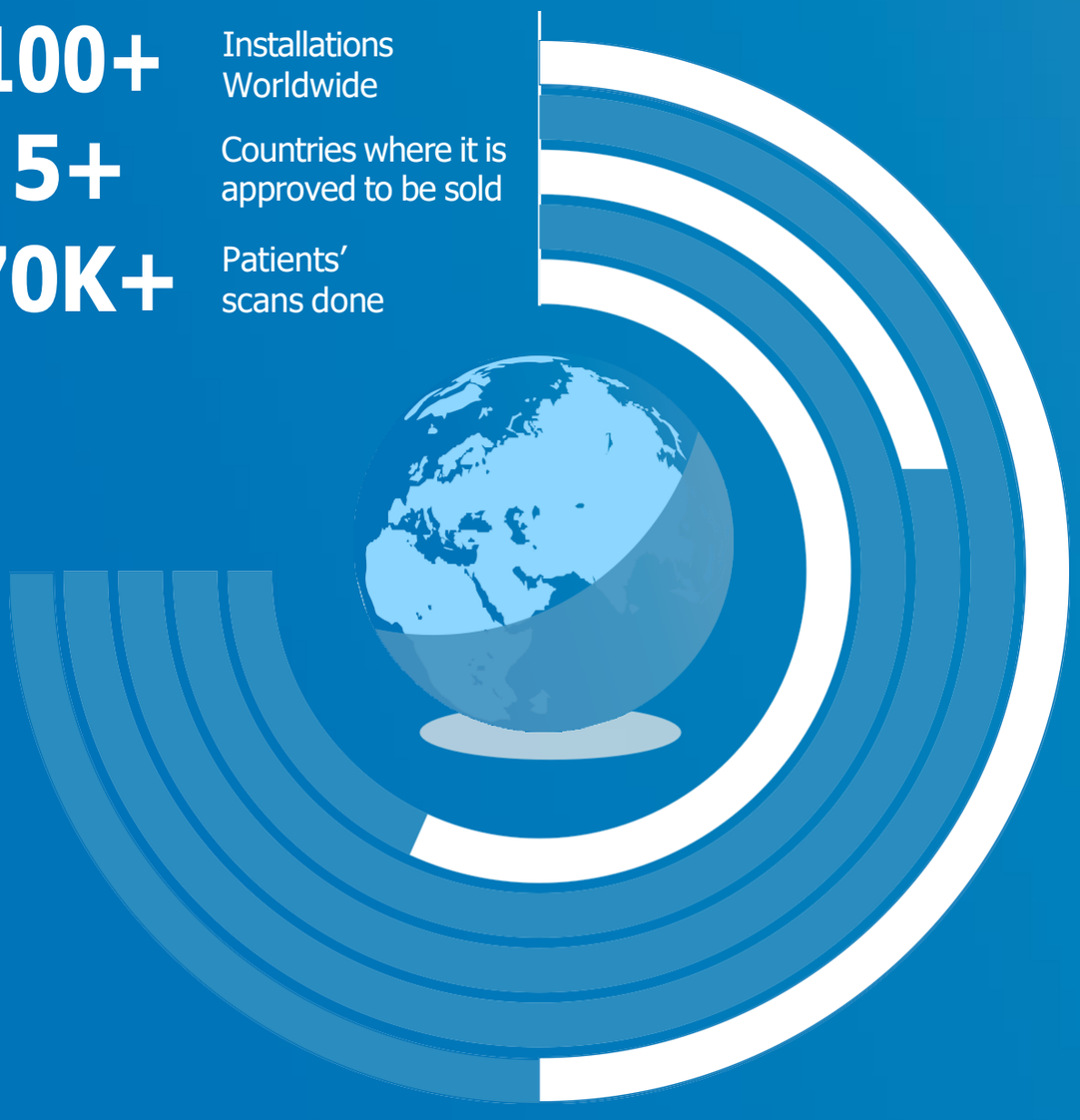
Experience u can count on…

Revolution ACTs
Expert Edition

100+ Installations Worldwide

5+ Countries where it is approved to be sold

70K+ Patients' scans done



REVOLUTION REIGNITED

The next revolution in CT imaging has arrived.

At GE Healthcare, we create clinically advanced and economically relevant solutions to address the healthcare requirements of caregivers and patients. With this vision in mind, Revolution ACTs CT scanners were launched in early 2015. Since its launch, GE Revolution ACTs has helped 1000+ centers across 70+ countries provide better quality care at a lower cost.

Over the years, Revolution family of CT scanners has redefined what CT makes possible. We believe quality imaging is not for a few but for everyone. Times may have changed, but our drive for reinvention has led to the next revolution in CT imaging.

Introducing the Revolution ACTs Expert Edition

Revolution ACTs Expert edition is our new CT platform, packed with end-to-end product enhancements – from capability to deliver 32 slices to solutions that specifically tackle your challenges associated with acquiring, operating and sustaining a CT system.

The Expert Edition is equipped with:

- 32 slice imaging
- New advanced applications
- Multi-modality workstation
- On-demand remote application support
- Finance and marketing support

THE BENCHMARK IN IMAGING EXCELLENCE

Taking your clinical practice to the next level.

NEW

Advanced imaging with 32 slices

The newly introduced Revolution ACTs Expert edition now generates images at fine intervals that enables reconstructed images that exceed 32 slices (images) per gantry rotation.[1]

Iterative Reconstruction technology

- X-ray tube of 3.3 MHU equivalent
  Tube heat capacity equivalence with ASiR for enhanced efficiency, low power consumption and operational costs.

- Generator of 40kw equivalent
  Revolution ACTs Expert edition generator is equivalent to 40kW owing to short-bore geometry design and ASiR.

- 1.67 x mA equivalent
  ASiR uses sophisticated statistical modeling to remove noise in images while preserving anatomical detail. It improves low-contrast detectability and can have IQ equivalent to an acquisition with 1.67 times the mA

Faster reconstruction

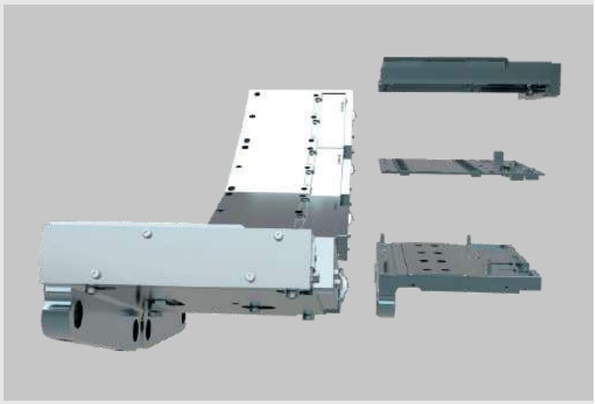
The Expert edition console supports improved reconstruction speed of 22 fps, thereby making it faster than previous generation CT scanners.

Improved Advanced Artifact Reduction (iAAR)

iAAR is used to reduce artifacts when a scan is done with very low mA. In conjunction with ASiR, it may reduce the appearance of metal-induced beam hardening and photon starvation artifacts.

High Performance: Clarity Panel Detector

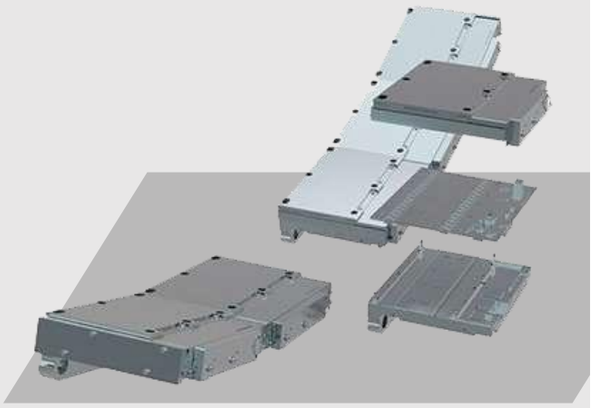
An innovative detector technology, it is an industry first to introduce a segmented panel design with many design elements inherited from our premium Revolution CT.



- Improved spatial resolution
  Clarity Panel Detector delivers exceptional spatial resolution of 18 lp/cm to enable high-quality imaging and visualization of anatomy in 3D.

- Lowers electronic noise by 20%
  An integrated detector design built with modern chipsets and DAS on Detecter (DoD) technology used in our premium Revolution CT to lower noise and achieve high signal to noise performance.

- Designed to be power efficient
  A compact and power efficient design, each detector module consumes a paltry 2mW per channel. Scanning can be done within minutes with the help of intelligent thermal management that is tightly integrated within the detector.



High Performance: Imaging Chain

- Ultra Kernel
  Adaptive Enhance Level Adjustment (AELA) can improve visual spatial resolution while maintaining pixel noise standard deviation. This kernel maybe helpful in enhancing the visualization of small anatomical structure with high contrast.

- Advanced Acquisition
  A higher sampling density provides better representation of the original signal and can potentially lead to improved image quality and fidelity. Using GE's novel conjugate cone beam reconstruction algorithm, the conjugated rows of projections are considered jointly in the back projection step and delivers improved Z-axis visualization performance.

Essential applications:

Volume Viewer
Using multi-object volume rendering and multi-planar reformat, making 3D visualization a part of your routine, and getting information about spatial relationships is easier than ever.

Navigation and Fly-Through
Use virtual endoscopy or Fly-Through to visualize intra-luminel structures like airways, sinuses, vascular structures, and view images dynamically.

SmartPrep with Dynamic Transition
Set up an intermittent monitoring of IV contrast enhancement in an area of your interest using Low Dose Scan. Use automatic transition to move from monitor phase to scan phase.

Vascular imaging and processing
Now get an enhanced analysis of vascular features and track multiple vessels. View oblique cross sections and rotate curved views to visualize vascular lesions.

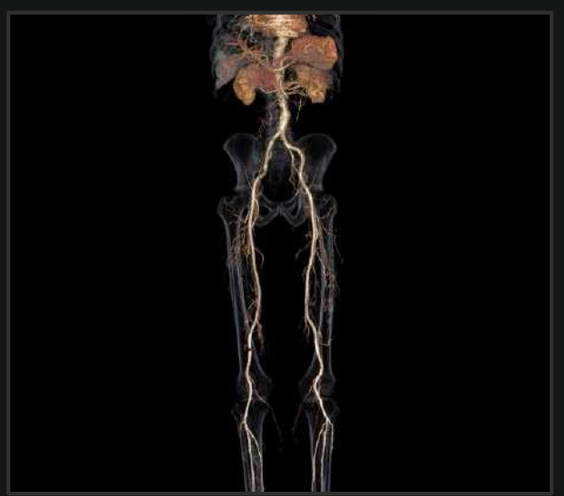
Non-invasive colon exams
Use 3D fly-throughs similar to optical colonoscopy and get prone and supine view displays that can be synchronized. Use the bookmarking tool to mark polyp locations and Distance & ROI tools to quantify size and homogeneity.

Color Coding for Kids™ protocols (CT for kids)
Providing pediatric scan protocols based on the Broselow-Luten™. A pediatric System, designed to facilitate pediatric emergency care and reduce medical errors.

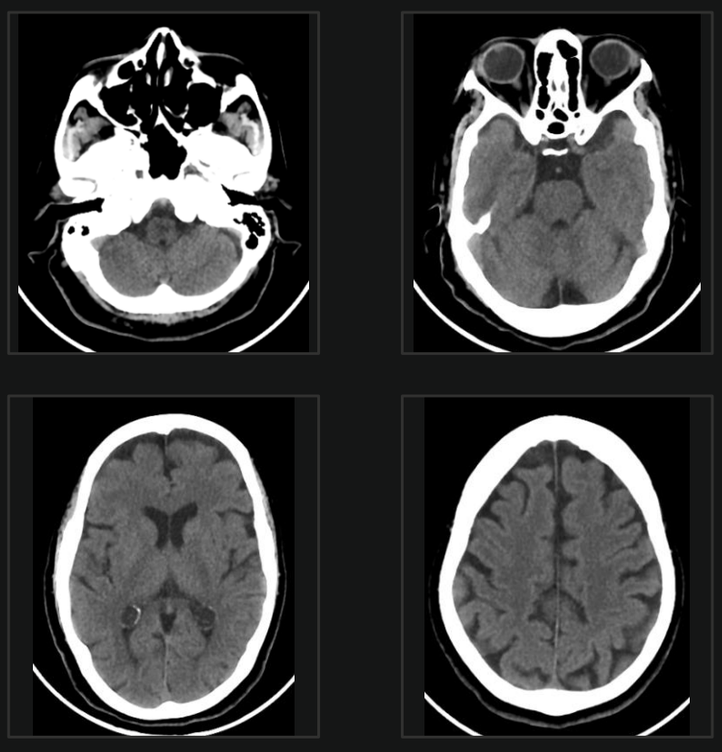
HEAD & NECK

CHEST

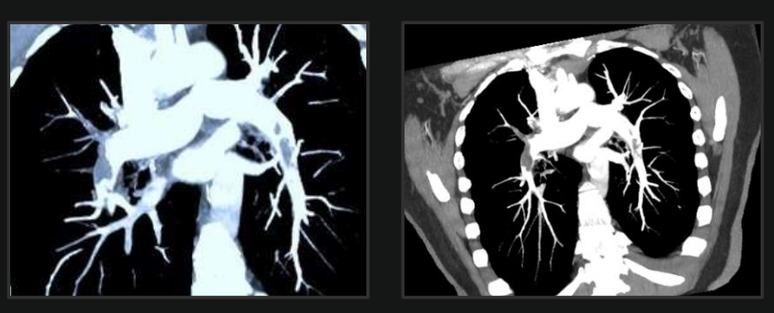
VASCULAR



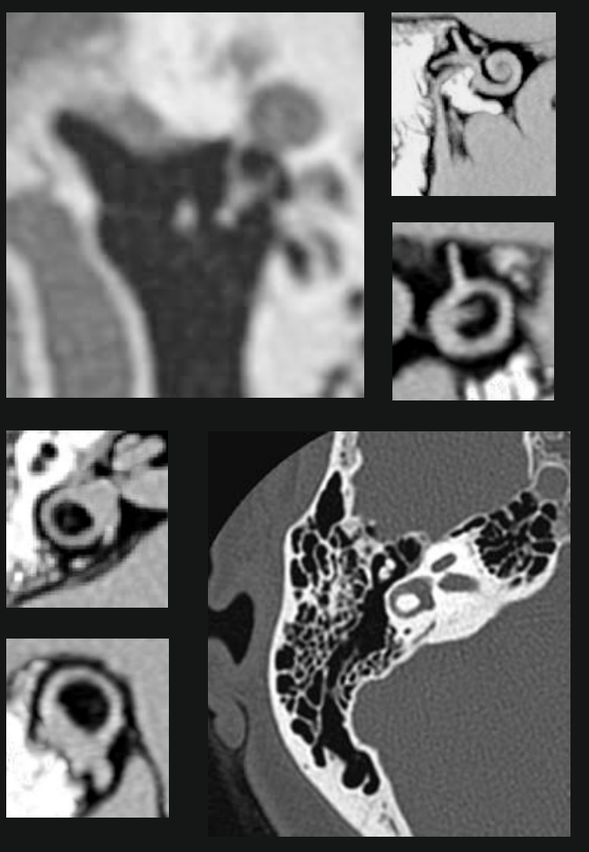
ROUTINE BRAIN SCAN WITH ASIR



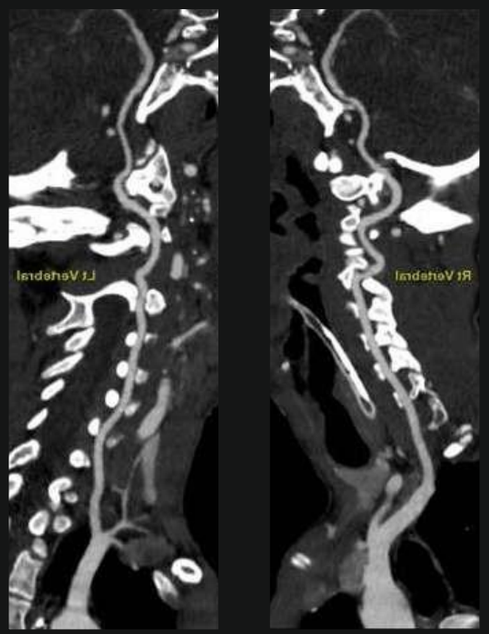
LOW DOSE PULMONARY ANGIOGRAM



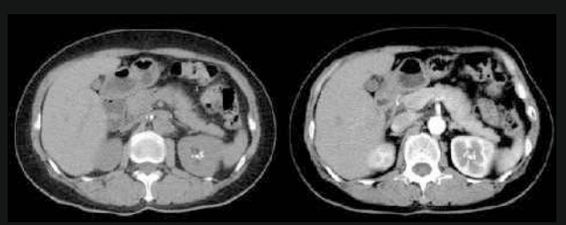
HIGH RESOLUTION IAC



FULL VESSEL ANALYSIS OF THE LEFT & RIGHT CAROTID ARTERIES



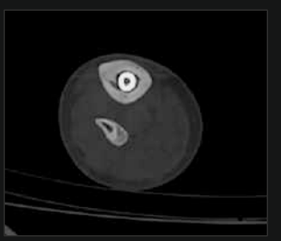
TRIPLE PHASE ABDOMEN SCAN

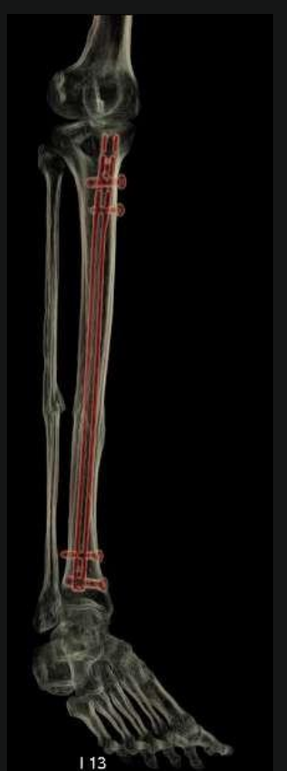


Non contrast Arterial phase

Portal venous phase

ARTIFACT REDUCED IMAGING OF IMPLANTS WITH ASiR and iAAR



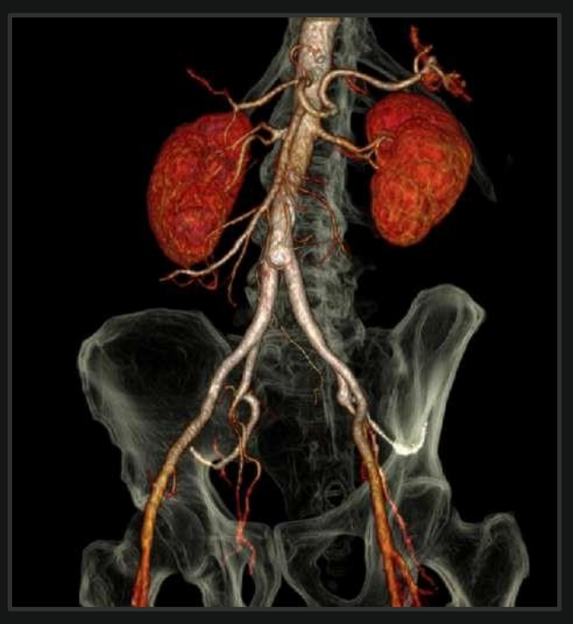


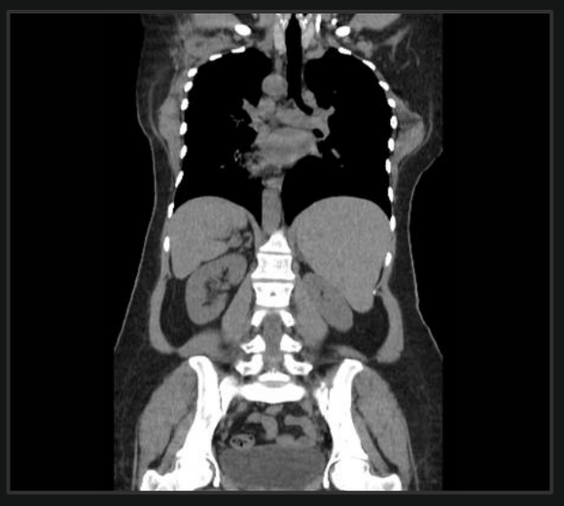
HIGH RESOLUTION CHEST CT (HRCT)

HIGH RESOLUTION CONTRAST ENHANCED CHEST CT

ABDOMEN

MSK





FUTURISTIC TECHNOLOGY UNPARALLELED PERFORMANCE

Experience high workflow and increased productivity with Revolution ACTs expert edition. Packed with end-to-end product enhancements, the Expert edition is designed with the user in mind.

Smarter technology. Better results.

Digital Tilt

Manage challenging patients and create quality scans. The new image reconstruction technology allows efficient setup and control of the CT console to get images at desired angles.

Spectral Calibration

Now create uniform images for off-center scans with a technology for beam hardening correction that makes positioning your patient much easier.

IQ Enhance

Help your patients breathe easier by completing scans faster. An algorithm that increases helical pitch acceleration by 3x and enables image quality like a conventional scan.

User Console

Inspired by the Revolution CT (our super premium-end product), the console for Revolution ACTs is designed to be easy to use. Its design is based on insights from respected radiologists and technologists.

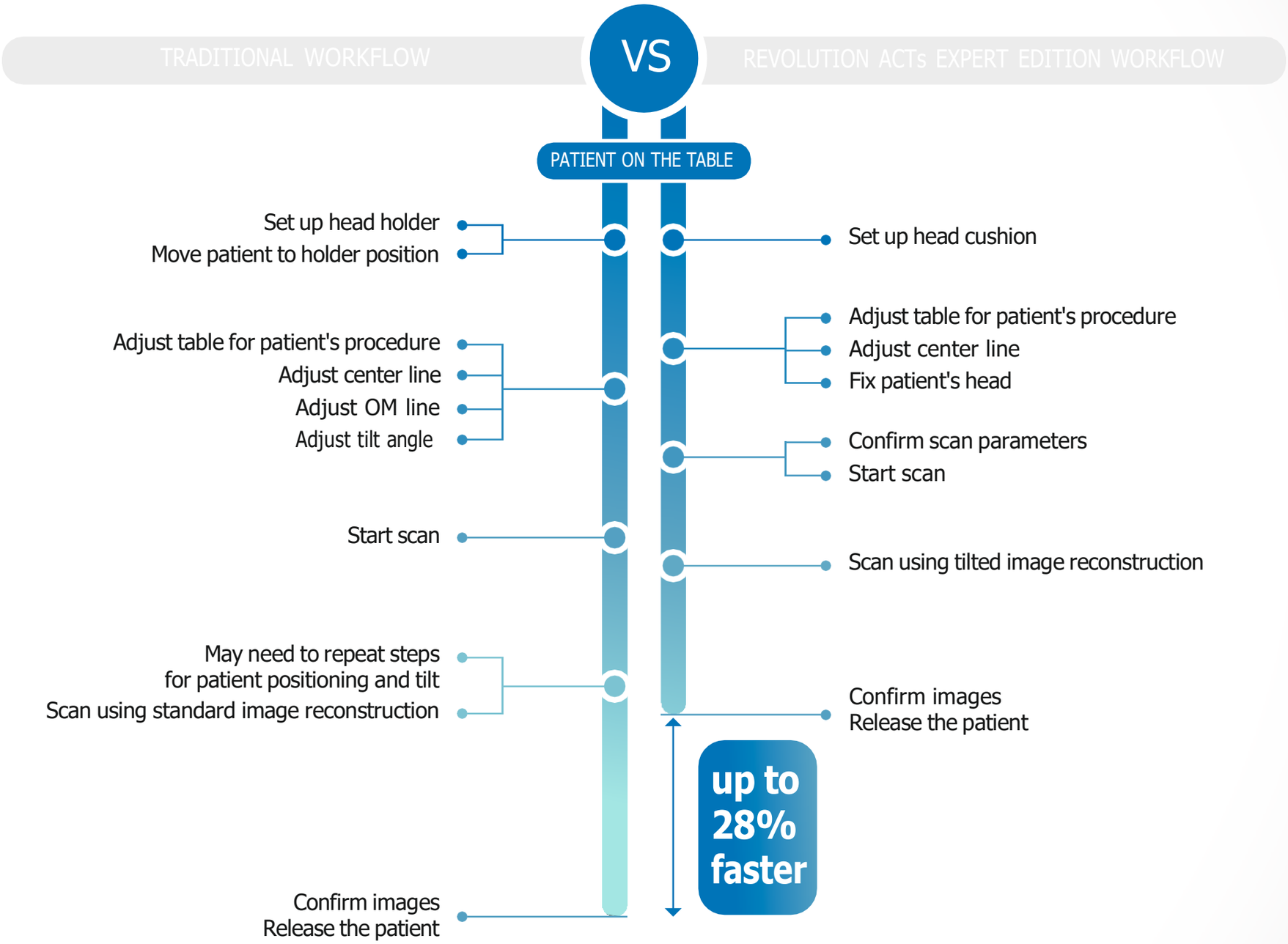
Smart Plan

Make scan setup simpler and efficient, assisting users to set up the localizer and get the initial localizer based on different anatomies including head, chest, abdomen, and pelvis. SmartPlan feature can be enabled through protocol management.

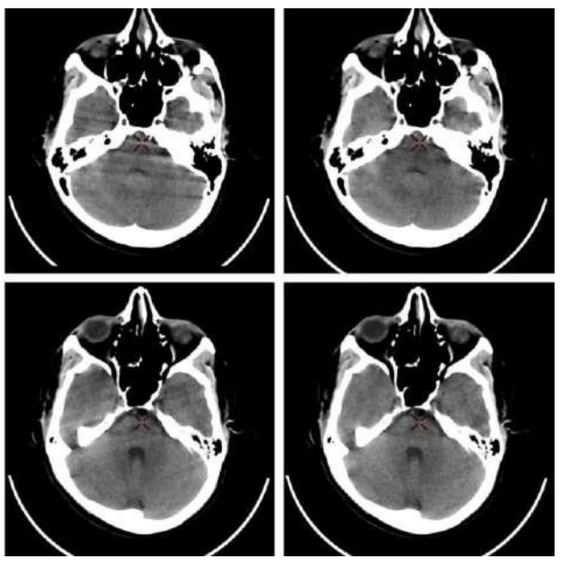
NEW

Direct Connect

- Now access your Advantage Workstation (AW) remotely and use the console's thin slice data. You can also eliminate network traffic and storage duplication.


TRADITIONAL WORKFLOW
VS
REVOLUTION ACTs EXPERT EDITION WORKFLOW
PATIENT ON THE TABLE
Set up head holder
Move patient to holder position
Adjust table for patient's procedure
Adjust center line
Adjust OM line
Adjust tilt angle
Start scan
May need to repeat steps
for patient positioning and tilt
Scan using standard image reconstruction
Confirm images
Release the patient
Set up head cushion
Adjust table for patient's procedure
Adjust center line
Fix patient's head
Confirm scan parameters
Start scan
Scan using tilted image reconstruction
Confirm images
Release the patient
up to
28%
faster

With motion | Motion Corrected



Auto-exam description

- Offers pre-program common exam description types in protocol setup
- Provides exam description, automatically tied up to the selected scan
- Reduces manual steps and scan setup time

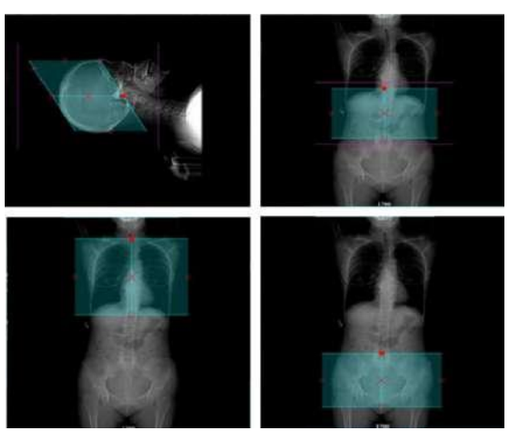
Motion Correction

- Corrects patient motion with advanced reconstruction technology
- Reduces need for repeat scans for uncooperative patients

Patient Preparation

Scan preparation

Smart Plan across anatomies

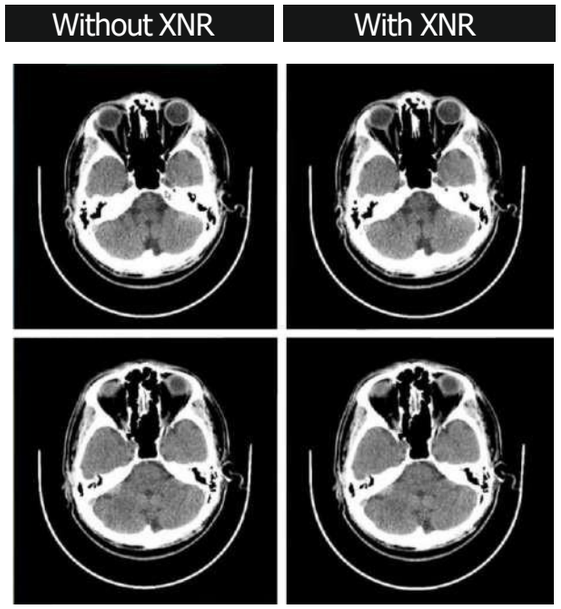


Optimized FastCal protocols

Reduces FastCal cycle time by up to 60% to lower tube consumption

Smart Plan

- Improves workflow and throughput with advanced Smart Plan feature
- Helps set scan region parameters quickly and consistently for your daily routine scans



XNR

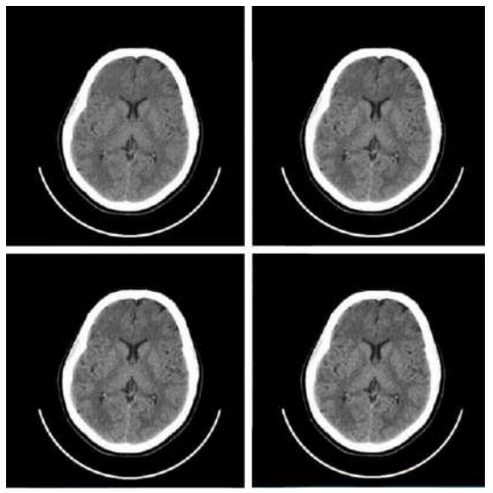
- Enhances Digital Tilt imaging through intelligent design
- Helps achieve higher IQ with lower mA
- Improves throughput and lower tube consumption

DMPR

- Enables Direct Multi Planar Reformats directly in real time
- Reduces manual steps and processing time
- Simplifies advanced processing

Scan workflow

Post-processing

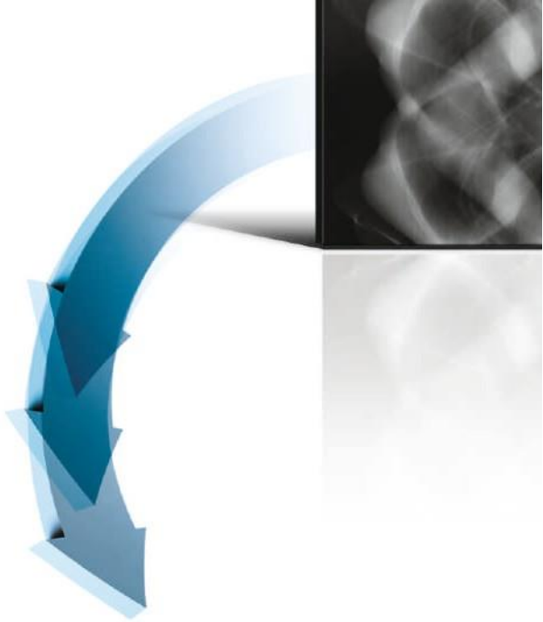


Post-processing

- Helps reduce manual filming steps and time with auto compose from scan prescription
- Improves filming workflow and user experience

Gray Scale Enhancement

- Enhances 'Gray-White Matter' differentiation for brain imaging
- Customizes filters prospectively as per protocol and radiologist's preference



Diagnostic images at the right dose add up to great care. That's why it's essential for you to limit your patients' radiation exposure to just what's necessary. To do that, you need a CT that makes it easier for you to lower radiation dose without making it harder to make the right diagnosis.

NEW

SmartTrack

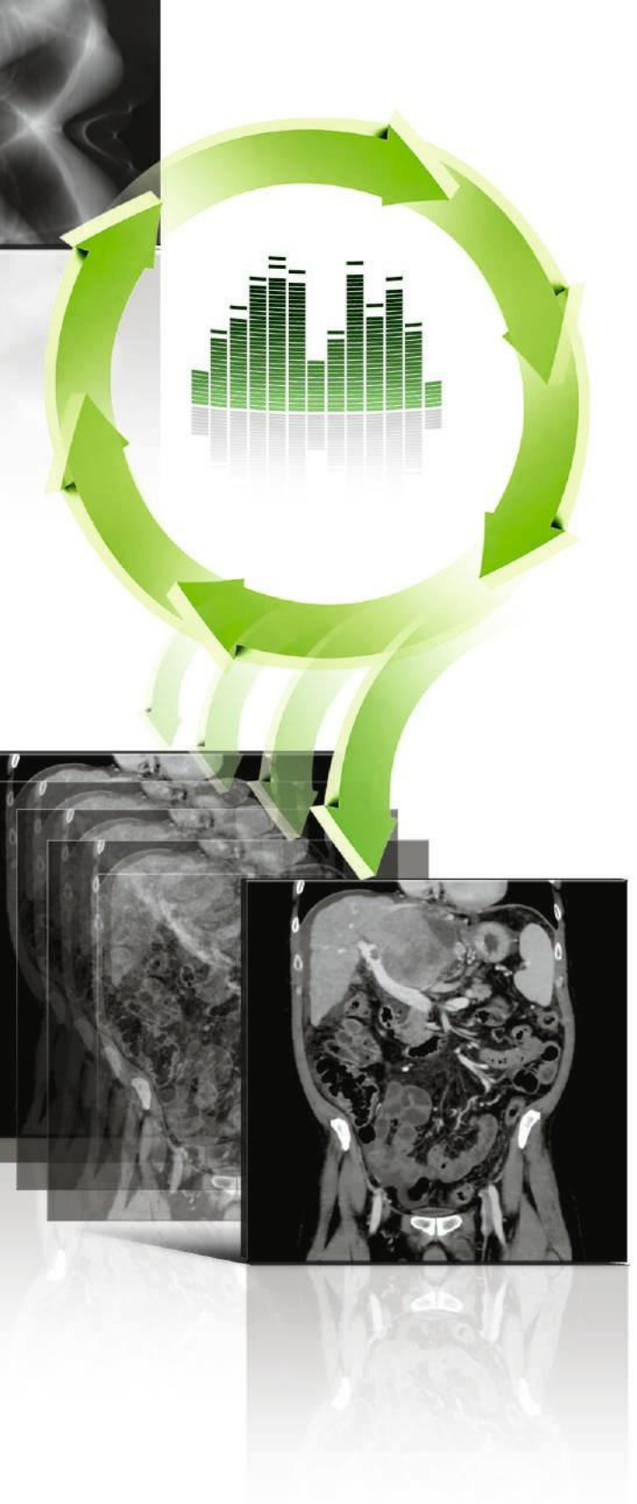
Experience advantages designed to deliver exceptional value for you and your patients.

Redefine the way you treat your patients with Revolution ACTs Expert edition equipped with SmartTrack. This feature keeps the beam focused only on the active detector cells, making sub-millimeter scanning possible, all while maintaining a high dose efficiency.

Smart Dose Technologies:

ASIR™ image quality at significantly lower dose

Acquire high-quality images using lower doses of radiation, and get accurate diagnoses and lower exposures. Lowers dose by 40% for your patients without reducing imaging quality. ASiR uses sophisticated statistical modeling to remove noise in images while preserving anatomical detail to improve low-contrast detectability. Equivalent of IQ to an acquisition with 1.67 times the mA, ASiR also allows the same image quality at a lower mA with less tube heat output, enabling longer helical scans. Performance will be equivalent to 40 KW and 333mA @120kV, 3.3 MHU tube heat capacity equivalence with ASiR. This helps lower power consumption and operational costs.



Organ Dose Modulation (ODM):

ODM was developed to act as a virtual shield and provide the dose reduction goal of a shield material without the negative effects it may have on imaging performance. Reduces radiation dose up to 40% when imaging superficial tissues like breasts and eyes through ODM.

Dose Check:

Receive notifications and alerts when predetermined dose levels are exceeded, enabling you to correct and confirm the right settings for scanning to avoid unnecessary radiation dose to your patient.

3D mA Modulation:

This feature enables the system to optimize tube current in x-y-z directions with negligible effect on image quality. The system varies mA according to the patient shape and scan protocol to lower dose in a patient-centric manner.

DoseWatch:

A comprehensive dose management solution that helps keep the dose level at practicable levels and produce sharp, focused diagnostic images. It tracks and monitors a patient's cumulative radiation dose over time and takes steps to prevent excessive radiation dose.

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