From fast patient throughput to robust cardiac scanning and new diagnostic capabilities, the new Aquilion Prime SP is a CT system of choice for all your imaging needs.

Built with premium technology migrated straight from our high end CT, Aquilion Prime SP empowers your facility to handle all patients from pediatric to bariatric, even the most challenging cases, while providing all staff with a fast and efficient solution to make their work easy.

Expand your clinical capability
Enhance your productivity
Capitalize on your investment

Complete Clinical Capability
From complex to routine, Aquilion Prime SP is designed to keep pace with your work list, with new standards of image quality provided at the right dose for every patient.

An expansive suite of protocol integrated application solutions enables the seamless and rapid adoption of advanced CT procedures into your clinical practice. Aquilion Prime SP can automate complex exams while delivering high-quality data.

Expand your clinical capability
The right balance between image quality and dose for every patient, from the youngest to the largest

Toshiba Medical’s PUREVISION Optics solution provides significantly improved imaging efficiency from photon generation to detection. An optimized beam spectrum combined with a more efficient detector result in a better balance between image quality and dose.

PUREVISION Optics transforms routine CT imaging to new levels of image detail and low contrast resolution.
Wouldn’t you like to ensure high-quality diagnostic results no matter the complexity of the examination or the patient’s clinical condition?

Adaptive Diagnostics is Toshiba Medical’s patient centric suite of unique imaging solutions, simplifying complex protocols and provide consistent quality results. These solutions improve workflow and decrease scanning complexity for the technical team.

Adaptive Diagnostics Clinical Solutions
Solving Your Clinical Challenges

Subtraction CTA®
Iodine Mapping®
SURECardio®
vHP3
SEMAR®
Dual Energy Tissue Visualization®

Superior visualization in CTA with true subtraction of bone and calcification.
Clearly defined distribution with color blood flow maps as a result of advanced registration and subtraction.
SURECardio Prospective helical acquisition can adapt to your patient’s heart rate automatically even overcoming unexpected arrhythmia.
vHP3 (three phase variable helical parameters)®.
SEMAR®(Single Energy Metal Artifact Reduction).
Tissue visualization with easy-to-use Dual Energy scanning.
The right dose for every patient at the right level of diagnostic image quality with every examination defines CT imaging on the Aquilion Prime SP.

Clinical capabilities you can rely on

The right dose for the right diagnosis
The protocol integration of exposure controls and AIDR 3D Enhanced iterative reconstruction stack automatically ensure excellent image detail at significant dose savings for the patient.

More kidney-friendly examinations
Aquilion Prime SP allows for automated kV selection based on the patient’s size and the clinical task selected. As part of Toshiba Medical’s SUREExposure™ technology, this function can help optimize the use of iodine contrast, decreasing cost and patient risk.

Worry-free metal imaging
Dose-neutral SEMAR utilizes a sophisticated reconstruction technique to remove artifacts caused by metal and thus improves visualization of the implant, supporting bone and adjacent soft tissues for clearer and more confident diagnoses.

AIDR* 3D Enhanced

SUREkV

SEMAR

*Adaptive Iterative Dose Reduction
Robust cardiac CT examinations – automated, adaptive and easy

Cardiac CT imaging has never been more robust than with the Aquilion Prime SP. The intelligent SURECardio engine is coded with the experience of thousands of cardiac examinations, ensuring scan and exposure parameters adapt exactly to your patients in real time.

Prospectively gated ultra helical
Combining the advantages of helical scanning with ECG narrow phase exposure, SURECardio Prospective offers excellent z-axis uniformity, short scan times, and the low-dose advantages delivered by prospective ECG scanning.

The Toshiba Medical advantage
SURECardio Prospective: Faster scan for reduced contrast requirements and superior temporal uniformity.

Real-time adaptive exposure
When detecting arrhythmia or an irregular heartbeat, the SURECardio engine compensates in real time by adapting the exposure window to ensure image reconstruction can provide a diagnostic examination.
Aquilion Prime SP empowers you to detect, stage and track tumors with SURESubtraction™ iodine mapping* available for every routine multi-phased liver exam.

Oncology imaging – from early detection to treatment response

Aquilion Prime SP’s accessible gantry design, 4D respiratory-gated acquisition capability and powerful advanced imaging applications deliver an ideal oncology solution from early detection and planning to intervention and treatment response verification.
From new graduates to experienced technologists, the Aquilion Prime SP’s integrated workflow solutions render even the most complex of tasks easy. Through exposure control automation, vHP3 scanning and automatic image processing, Aquilion Prime SP will be a powerful part of your imaging team.
The all new vHP3™ allows three examinations to be performed in a single acquisition, seamlessly transitioning between scan parameter settings optimal for each body region.

Providing the flexibility to vary between ECG gating, scan pitch and exposure control in a single uninterrupted scan, enables patient exams to be performed faster, with the potential for less contrast media and lower radiation dose.

vHP3’s adaptive reconstruction engine provides high fidelity images through the entire scan range, overcoming the challenges of image reconstruction through the transition zones. With three scans in one, the single series reconstruction enables several studies to be interpreted simultaneously for faster reading.
Power assisted patient positioning

When every second counts you need imaging equipment to work for you. The Aquilion Prime SP power assisted positioning* expedites the set up of patients and reduces the heavy lifting required by the attending care team.

Workflow that makes you perform

Protocol integrated automation at every step empowers even a novice operator with the skills to perform brilliantly the first time – every time.

Select Protocol
- Automated
- Integrated
- FAST
- Zero Click

Scan Planning
- Advanced Visualization
- Patient Dose Management
- Real-time reconstruction
- Zero Dose reduction

Scan
- Results

Advanced 42mm

42 mm

42 mm
From installation to department expansion, the Aquilion Prime SP is the right economic choice. Designed to be more than efficient, Aquilion Prime SP checks all the boxes for a CT system capable of fast throughput, patient and technologist safety and a platform to expand any department’s imaging portfolio for improved productivity.
Increased productivity, lower costs, enhanced diagnostic performance

Aquilion Prime SP is a total solution for all your clinical demands. A full host of innovative design features ensure outstanding patient accessibility, efficient workflow and low running costs. A wide range of robust imaging applications and workflow automation features provide exceptional diagnostic precision and clinical versatility.
Cardiac Imaging

TAVR scan with vHP3 for optimal gating

Upper Chest
Non-Gated

Heart
ECG-Gated

Abdomen
Non-Gated

RCA LAD Cx
Body Imaging

Original

SEMAR

SURE Subtraction Angio™ with automated bone, calcium and stent removal
Dual Energy® mono-sodium urate visualization
Detector
- PURE ViSion detector technology
- 80 rows of 0.5 mm

Gantry
- Rotation time 0.35 s
- Generator 72 kW
- Bore aperture 78 cm
- Tilt ± 30°

Patient couch
- Max. load
  - Max. load
  - Max. load range
- Reconstructed speed
  - Min./Max.: 30.0 / 80.0 cm/s
- Reconstruction
  - Reconstruction algorithm: AIDR 3D
  - FOV: 500 mm, 700 mm

Installation
- Power capacity
  - Power capacity
  - Min. installation space
- Image quality
  - Spatial resolution: 21.5 lp/cm at MTF 0%

Main specifications

Disclaimer: Any reference to X-ray exposure is intended as a reference guideline only. The guidelines in the documentation are not intended as definitive for any objective or technical purpose. Each patient medical condition is unique and the use of this equipment to diagnose or treat a patient is at the discretion of the clinician. The guidelines serve as general guidelines and should not be used in isolation from medical judgment. All products mentioned are intended as illustrative only and may not be available in your region. Contact your local representative for further information.