
Alphenix 4DCT
Integrate modalities with ease

Alphenix 4D CT perfectly integrates also with Canon Medical’s ultrasound solutions with dedicated transducers, imaging and navigation tools to further enhance confidence and accuracy during interventional procedures and their follow-up.
Quickly diagnose, treat and verify with confidence.

Alphenix 4D CT seamlessly integrates our flexible Alphenix interventional system with the advanced Aquillion CT imaging suite into one versatile solution. With the ability to see, diagnose, plan, treat and verify in the same room, Alphenix 4D CT helps you prioritize safety, speed and efficiency during complex interventions.
Tightly integrated to help you boost productivity and patient care

Greater than the sum of the two parts, Canon Medical’s Aquilion CT imaging suite and the Alphenix angiography system work in concert to help you make real improvements in efficiency, workflow and clinical confidence.

Eliminate patient transfer and improve efficiency
With the Alphenix 4D CT there is no need to transfer patients between rooms to confirm device placement or procedural success. Switching between CT and angio systems is smooth and fast. Both systems can also be used in tandem without the need to park one of them.
Navigate in 3D with confidence and accuracy
3D roadmapping enables you to superimpose a 3D-reconstructed vessel and device-enhanced mask volume on the fluoroscopic image for better visualization of the target anatomy and improved guide wire and catheter manipulation.

Embolization planning
The Embolization Plan software allows for automatic or manual tumor segmentation, safety margin definition around the segmented tumor and automatic bone segmentation for better viewing.

CT and angiography in sync
SUREGuidance synchronizes the location of the region of interest between the two modalities. The CT gantry, angiographic C-arm and table move automatically, enabling you streamline workflow and prioritize procedural efficiency.
High resolution, low dose imaging right at your fingertip

Canon Medical’s CT scanners employ a full host of advanced imaging technology to deliver high-quality images with an optimal balance of image quality and dose. Advanced post-processing tools help simplify complex protocols and provide consistent quality results.

Sharp, clear and distinct images at low dose
True CT imaging in the same room can deliver improved image quality and better low contrast detectability. Canon Medical’s Al-driven Advanced Intelligent Clear-IQ Engine (AiCE) technology reconstructs images that are sharp, clear and distinct.*

Pixel perfect imaging, low iodine and patient dose
SURE Subtraction Iodine Mapping helps you enhance your diagnostic capabilities with colored iodine maps provided automatically for any multi-phase abdominal protocol.

* AiCE is available on Aquilion ONE/GENESIS Edition and Aquilion Prime SP as option.
Genuine CT offers many advantages over cone beam CT. More flexible imaging with better image quality and faster acquisition, and last but not least, a significantly lower effective dose help you perform complex procedures efficiently and safely.

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Better patient access, extended field of view

The extra-wide, flared gantry of our CT scanners provides outstanding patient access from front and rear. Compared to cone beam CT, true CT scanning offers the ability to acquire images with an extended field of view faster and at significantly lower dose.
Crystal-clear imaging, superior versatility

Alphenix 4D CT is a powerful hybrid imaging system that combines the world’s most flexible angio suite with the most advanced dynamic volume CT. Delivering an outstanding solution for image-guided interventions, the system covers a wide range of interventional procedures.

Advanced perfusion imaging assists you in imaging and treatment planning of tumors more accurately and immediately verifying the response to therapy. Alphenix 4D CT simplifies the positioning of micro-catheters and needles with 4D imaging of tumor vascularization and real-time 3D needle tracking.
Canon Medical’s wide detector CT technology with up to 16 cm coverage in a single rotation allows you to acquire anatomical and functional data simultaneously with high spatial and temporal resolution.
Diagnose and treat with speed and flexibility

Speed is crucial. Robust diagnostic images can be captured in a fraction of a second, enabling you to minimize dose exposure, image artifacts and procedure time. With the flexibility of the interventional suite, you can treat without moving the patient. Across a wide range of clinical applications, from oncology, cardiology, neurology and trauma care, Alphenix 4D CT offers possibilities to deliver safe and efficient treatment to your patients.

Configure Alphenix 4D CT with the CT that meets your needs

Alphenix 4D CT is available in a wide range of configurations to provide an optimal solution for diverse clinical environments.
Neuro/stroke

Canon Medical’s area detector technology delivers iso-phasic 4D vascular imaging without table or gantry movement for robust evaluation of fistula and aneurysm treatment. The Neuro ONE stroke protocol provides dynamic perfusion mapping in under a minute for fast and reliable diagnostics in acute stroke patients.

Cardiac intervention

Alphenix 4D CT provides robust low-dose cardiac CTA. One rotation is all it takes to capture the entire heart in just a split second with the Aquilion ONE. Eliminating motion artifacts, this technology is perfect for planning interventional procedures and for verifying percutaneous stent or valve placements and repairs immediately at tableside.

Trauma

Speed is foremost important in managing trauma patients. With Alphenix 4D CT you are now capable of diagnosing and treating without the need to transfer the patient between rooms, saving valuable time.
One room. One system. Many procedures.

The Alphenix 4D CT system combines the interventional lab with a complete CT imaging suite for a more streamlined workflow and a smoother, safer patient experience in a single clinical setting. You no longer need to transfer the patients between departments – Alphenix 4D CT enables you to plan, treat and verify in a single setting for better patient care and higher productivity.

Free patient access whenever needed
Convenient parking positions for both the C-arm and the CT gantry ensure free access to the table for patient mount and emergency procedures.

Freedom to move with your workflow
Alphenix offers a 270° range of movement allowing you to position the C-arm to suit your workflow even during the most complex interventional procedures.

Unique lateral coverage to aid transradial procedures
The dual-track ceiling-mounted C-arm of the Alphenix 4D CT provides unique fingertip-to-fingertip coverage during transradial and transbrachial procedures.
Smooth workflow with head-to-toe access
While the CT gantry can be fully removed from the workplace, Alphenix’ five-axis technology provides faster and better positioning of the C-arm from head to toe.

Fine detail visualization
Advanced CT imaging with the industry’s only 0.5 mm detector element means greater resources for planning and verifying in the interventional space.

Seamless transition between modalities
Alphenix 4D CT markedly improves workflow with its SURE Guidance technology that manages seamless transition between modalities.
Better protection
For patients and clinicians

Dose management is an important issue for everyone. Canon Medical has optimized every step of the imaging chain to reduce radiation dose while improving workflow and image quality. DoseRite is our comprehensive dose management solution. Combining advanced detector design with an array of powerful software features, it provides you with an extensive host of dose-saving and dose management functions.

Spot Fluoro Display
Using Spot Fluoro can result in substantial dose reductions by displaying the full-frame Last Image Hold (LIH) around the live fluoro image, reducing the need to open up collimation for viewing landmarks outside the spot field.

Live Zoom
Live digital zoom increases image display size in real time during both fluoroscopy and digital acquisition offering potential dose savings compared to conventional FOV magnifications.

Dose Tracking System (DTS)
The operation screen of the Dose Tracking System, illustrating the color-coded skin dose distribution display area and the dose information display area that includes numerical peak skin dose and FOV peak skin dose estimates.