OnSite 3D Extremity System


On-Site Extremity CT Exams Deliver Clinical Excellence and Superb Productivity.

SMART IMAGING SOLUTIONS
A Great Source of Diagnostic Insight Can Now Be OnSight.

The CARESTREAM OnSight 3D Extremity System is setting a new industry standard for extremity CT performance. OnSight is designed to be OnCall – right on the premises, ready whenever you are. It’s a system that’s OnTarget with your facility’s needs – superb 3D upper extremity and weight-bearing lower extremity exams for confident, accurate diagnosis. To keep you OnBudget, OnSight offers a price that’s affordable for orthopaedic practices, imaging centers and hospitals. When it comes to productivity, OnSight keeps you OnTime, speeding your workflow – and may provide OnGoing revenues by keeping billable imaging services in-house.

Advantages at a Glance

• Provides 3D, weight-bearing CT exams for viewing of lower extremities under natural load.
• Captures the full area of interest in a single scan and delivers pristine diagnostic images.
• Offers convenient patient access and streamlined workflow with its easy-open door.
• Improves anatomical visibility and diagnostic confidence with iterative reconstruction and advanced metal-artifact correction.
• NEMA XR-29 Compliant (MITA Smart Dose).
The OnSight System Optimizes both Clinical Performance and Productivity.

Are you an orthopaedic practice looking to add in-house CT? Or a hospital or imaging center wishing to free up existing CT systems for other needs? If so, here’s the solution you’ve been waiting for.

A world leader in medical imaging has launched a revolution in extremity CT. The CARESTREAM OnSight 3D Extremity System provides high-quality, diagnostic 3D images at the point of care – with an easy-open bore and patient access to allow weight-bearing studies not possible with traditional CT. And, it provides these unique advantages at a fraction of the capital, installation and maintenance costs of traditional CT. OnSight also delivers a host of features that speed workflow and maximize productivity.

The bottom line? An advanced imaging system for fast, accurate diagnosis and commencement of treatment – made efficient and affordable.
Feature-Rich Design.

- Advanced scatter and metal artifact-correction algorithms.
- Isotropic spatial resolution.
- Three X-ray sources and large field of view.
- Delivers high-res 3D images.

OnTarget Diagnosis.

The OnSight 3D Extremity System provides exceptional diagnostic value and image quality. In addition to performing 3D exams of upper extremities, the system also enables weight-bearing exams of knees, ankles, feet and toes—so physicians can view these body parts under true physiological loads. These exams are also easy on patients, because our wide easy-open door allows patients to enter the bore quickly and comfortably. The OnSight System:

- Provides high-resolution 3D images that can help reveal subtle or occult fractures.
- Allows ongoing, 3D studies to facilitate accurate evaluation of fracture healing over time.
- Reconstructs soft-tissue view to visualize ligaments and tendons.
- Employs three X-ray sources to reduce artifacts and improve the overall field of view, to capture the full anatomy of interest in a single scan.
- Utilizes advanced scatter and metal artifact reduction algorithms (CMAR) to improve the visibility of patient anatomy and reduce the distracting influences of metal implants.
- Upgradeable to Carestream’s second-generation metal-artifact reduction software (CMAR 2) for improved visibility of patient anatomy around metallic objects; with optimized image processing in CMAR 2 based on the amount of metal present.\(^1\)

OnBudget Performance.

When you combine the cost of purchasing, installing and maintaining a traditional CT system, the price tag is simply too high for smaller imaging facilities and most orthopaedic practices. The OnSight 3D Extremity System addresses this issue with a relatively low acquisition cost and these additional cost-saving advantages:

- Small footprint and simplified design to cut the time and cost of system installation, compared to conventional CT units.
- Elimination of the need for a large, high-cost shielded room,\(^2\) reducing capital costs and maintenance expenses.
- Productivity gains for imaging centers and hospitals, by freeing up full-body CT systems for additional exams.
- Backed by Carestream’s 100-year history and a large, global service network.

\(^1\) Purchasable software option.
\(^2\) Regulatory requirements regarding shielding may vary, depending on region.
OnSight Business Advantages.

The OnSight System is good for your business as well as for your patients. Its advantages include:

- In-house 3D capabilities can be an important practice differentiator and marketing advantage.
- The ability for surgeons to share the comprehensive information and images the system provides with patients to explain their condition and facilitate agreement on the recommended treatment.
- NEMA XR-29 CT compliance allows for full Medicare/Medicaid reimbursement.
- On-site 3D imaging keeps the imaging service and potential revenue stream in-house.

OnGoing Patient Comfort and Peace of Mind.

A patient's exposure to radiation over time is always a concern. So the OnSight 3D Extremity System is designed to utilize lower-dose imaging than traditional CT scanners – while still providing superb images. Unlike full-body CTs, only the targeted body part receives radiation. And it is NEMA XR-29 CT compliant, which provides safeguards for patient radiation safety. Other features designed with the patient in mind include:

- Three-dimensional adjustment of height, tilt and rotation for easy patient positioning.
- An easy-open system door, allowing patients to enter the bore quickly and comfortably.
- A secondary monitor that allows patients to view the scan progress.

OnTime Workflow.

Looking to increase your productivity? We all are. The OnSight System keeps your facility running with outstanding efficiency:

- The versatility of both high-resolution 2D and 3D exam capability in one system.
- System auto-positioning and a large touchscreen monitor to let technologists work quickly and efficiently.
- A simplified user interface to guide the technologist through each exam.
- Optional Administrative Analysis & Reporting Software to provide a digital dashboard – a centralized management tool to see average and maximum exam exposure levels, number of rejected exams by tech and more.1

Easily adjustable exam chair makes patient positioning a breeze.

Secondary screen lets patients watch as their scan progresses.

LED lights indicate scan status.

Patient-support handles provide safety and comfort and rotate out of the way when not needed.

Open-bore design for easy patient access.

Open-bore design for easy patient access.
Depend on Pristine Clinical Image Quality.

High-resolution capture and advanced software-processing tools provide a clear, unobstructed and detailed view for confident, accurate diagnoses.

A natural weight-bearing configuration enables a more accurate determination of the relative placement and orientation of the bones in the foot ankle and knee while under realistic load conditions. Note the curve of the arch (blue line) as well as the relative location of the joint spaces on the left image as compared to the weight-bearing image on the right. Look at how the arch has flattened, illustrating a flatfoot deformity, and how the position of the talus has changed, so that now it appears to impinge on the calcaneus.

Patient fell off a roof; Intraarticular Sanders Type 4 fracture severely comminuted. It was determined that there was enough bone at the subtalar joint (orange line) and the calcaneus was reconstructed successfully; 2D radiographs did not provide enough information.

A non-displaced fracture of the scaphoid (blue arrow) is seen here in a patient wearing a cast. Also seen is subchondral sclerosis of the proximal scaphoid at the scapho-radial joint (orange arrow).

The fracture line could also be seen on the 2D radiograph, although not as clearly. However, the subchondral sclerosis cannot be appreciated on radiographs, which shows the added benefit of OnSight imaging.

Fracture of the proximal radius or radial head. We see a displaced fracture. While seen clearly in the image on the right, the 3D-rendered image on the left will help the orthopaedic surgeon develop a good preoperative plan of treatment.*

*3D rendering can be viewed on the OnSight system; to view on PACs, a 3D rendering capability is required.
Here's a saggital plane through the arm, showing an internal fixation of the radius with plate and screws. The radius fracture is better visualized after CMAR 2 software (a purchasable software option) is applied.

A tibial plateau fracture with fixation, with the ability to distinguish the fracture fragments in the presence of metal (CMAR). Used to evaluate fracture healing and hardware stability to compare weight- and non-weight-bearing views.

Step Up to Higher Image Quality.
Expand your practice with in-office Extremity CT exams.
**The Fastest Route to a Successful Imaging Future.**
As you travel to the future of imaging, what’s your next step? Maybe you want to move from analog to digital. Perhaps you need to accelerate your X-ray workflow. Or it could be you’re ready to add new imaging modalities to your facility to provide better patient care. Wherever you’re headed, we have the smart solutions you need: Full-digital imaging rooms and leading-edge mobile units. Wireless, shareable detectors and CR-to-DR retrofit kits. Affordable CR systems. As well as additional modalities such as Extremity CT and Fluoroscopy.

**Start Mapping your Route Today.**
Visit carestream.com and start your journey to true patient-centric care.

Carestream also offers a suite of products that support our solutions-based enterprise imaging IT platform. The gold standard in X-ray film. And, when it comes to digital output, our laser imagers, managed print solutions and self-service kiosk provide high-quality solutions for all imaging modalities.

**A Community of Service and Support.**
For dependable service, look to our Customer Success Network. We work continuously to improve your imaging performance, help you to innovate as needs change, and make the most of your budget and resources. Carestream’s Customer Success Network surrounds you with a dynamic team of experts, with a Single Point of Entry for easy, customized access to the right people in every situation. You and your patients will benefit from the expertise and best practices only Carestream can deliver – based on thousands of customer engagements worldwide and our 100-year heritage in medical-imaging innovation.