

Revolution Apex platform

Lead CT now and into the future

Lead CT now and into the future

Today's healthcare professionals are facing increasing pressure to serve communities with rapidly growing patient volumes and more complex imaging needs. The challenge is to create high-quality images while managing a heavy patient load. Furthermore, these clinical pressures require new CT systems equipped to meet a broadening range of diagnostic needs. In an environment where the pace of innovation in technology is only getting faster, the financial and operational barriers to stay at the leading edge are more prevalent than ever.

We recognized the need to deliver CT technology that not only improves productivity and diagnostic confidence right now, but also provides the assurance of powerful, built-in adaptability. What today's radiology departments need is a cutting-edge platform with unprecedented clinical capabilities that will make you **ready for every future**.

“When you think of equipment here at our hospital, we anticipate that we will keep our CT systems for 10 years. Now, of course, a CT system is new. Over the years, it's no longer the high-end system it was before. How can we make sure that during the lifespan of the system, there can be some improvements?”

– Alain Luciani, M.D., Ph.D., Professor of Radiology,
University Hospital Henri Mondor, France



Introducing the Revolution Apex platform From here, anything is possible

The Revolution™ Apex platform is our answer to your challenges. It is an all-new CT platform that offers the best of modern CT technology to provide versatile and unprecedented clinical solutions for your most challenging patients. The advanced technology at the core of the Revolution Apex platform includes a scalable detector, the most powerful X-ray tube, next-generation spectral imaging, the industry's fastest rotation speed, breakthrough image quality and Effortless Workflow.

The Revolution Apex platform was created with a "future-ready" design philosophy, which lays the foundation of our entire portfolio of Revolution Apex platform systems. All of which are designed with built-in scalability, so you can be **ready for every future**. With the choice of 4, 8 or 16 cm of coverage, you can decide which system is right for you today and easily upgrade to more capability when you need it.

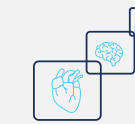


“By having the Revolution Apex platform, we made the choice for a platform that led us to have that smooth evolution in technology, not by taking two big steps, but still staying at the edge.”

– Johan de Mey, M.D., Ph.D., Chair of Radiology,
University Hospital Brussels, Belgium



Best-in-class technology in every dimension of the CT imaging chain



Unprecedented clinical solutions across a wide range of care areas

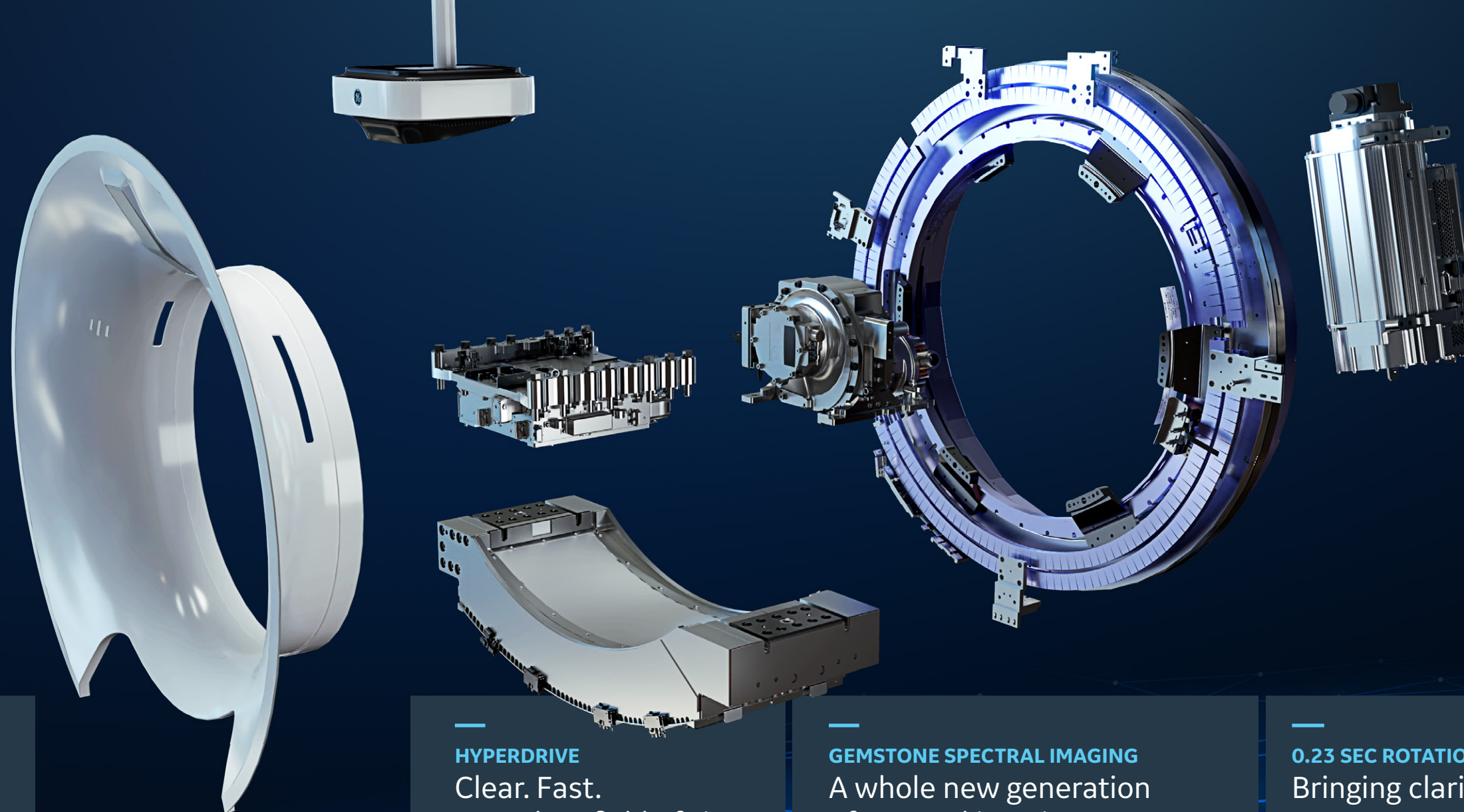


Future-ready platform ensures quick access to the next generation of CT innovation

TECHNOLOGY

Best-in-class technology The capability of tomorrow's CT platform

To create a high-performance system today that is ready for the future, the Revolution Apex platform was designed with a "future-ready" philosophy and equipped with the best available technologies for every component of the imaging chain. We started with the ultra-fast, ultra-scalable Gemstone™ Clarity Detector. We paired that with the incredible power of our Quantix™ X-ray Tube for wide coverage as well as the fastest gantry speed in the industry and next-generation spectral imaging. No matter which Revolution Apex platform system you choose, you'll experience the benefits of this state-of-the-art hardware.



GEMSTONE CLARITY DETECTOR

Built-in flexibility

Modular detector design with three different configurations for easy on-site upgrades from 4 cm up to 16 cm.

QUANTIX X-RAY TUBE

Power like never before

With the ability to deliver 1300 mA of flux output in a 109 kW package, this is the most powerful CT X-ray tube ever made.

HYPERDRIVE

Clear. Fast. Complete field of view.

Scan the whole chest in less than a second with a table speed of 437 mm per second.

GEMSTONE SPECTRAL IMAGING

A whole new generation of spectral imaging

Ultra-fast, kV/mA synchronized switching with integrated TrueFidelity™ for almost perfectly registered volumetric dual-energy CT data and exquisite image quality for all patient sizes.

0.23 SEC ROTATION TIME¹

Bringing clarity to all cardiac cases

1-beat cardiac CT for any heart rate just reached new heights in speed, image quality and dose with the industry's fastest rotation speed, TrueFidelity and Snapshot Freeze 2 for an effective temporal resolution of 19.5 msec.

¹Available on Revolution Apex Elite. 510(k) pending at FDA. Not available for sale in all regions.

TECHNOLOGY

Best-in-class technology

Futuristic image quality

TrueFidelity is our state-of-the-art image reconstruction technology that uses a dedicated Deep Neural Network to generate high-definition, low-noise CT images. Fully integrated with both single-energy and spectral imaging, TrueFidelity produces images with exceptional sharpness, low-contrast performance and your preferred noise texture, even with low dose.



Filtered Back Projection



TrueFidelity

Intelligence that's easy to work with

Natively running on the Xstream Wide-Cone Reconstruction Server, TrueFidelity is fully integrated into your clinical workflow and reconstructs images incredibly fast for both routine and acute care settings.

“ We have seen the improvement in iterative reconstruction, but deep learning reconstruction takes it to a new level in terms of bringing the radiation dose down, while also improving image quality. ”

– Ricardo Cury, M.D., Chairman of Radiology,
Baptist Health

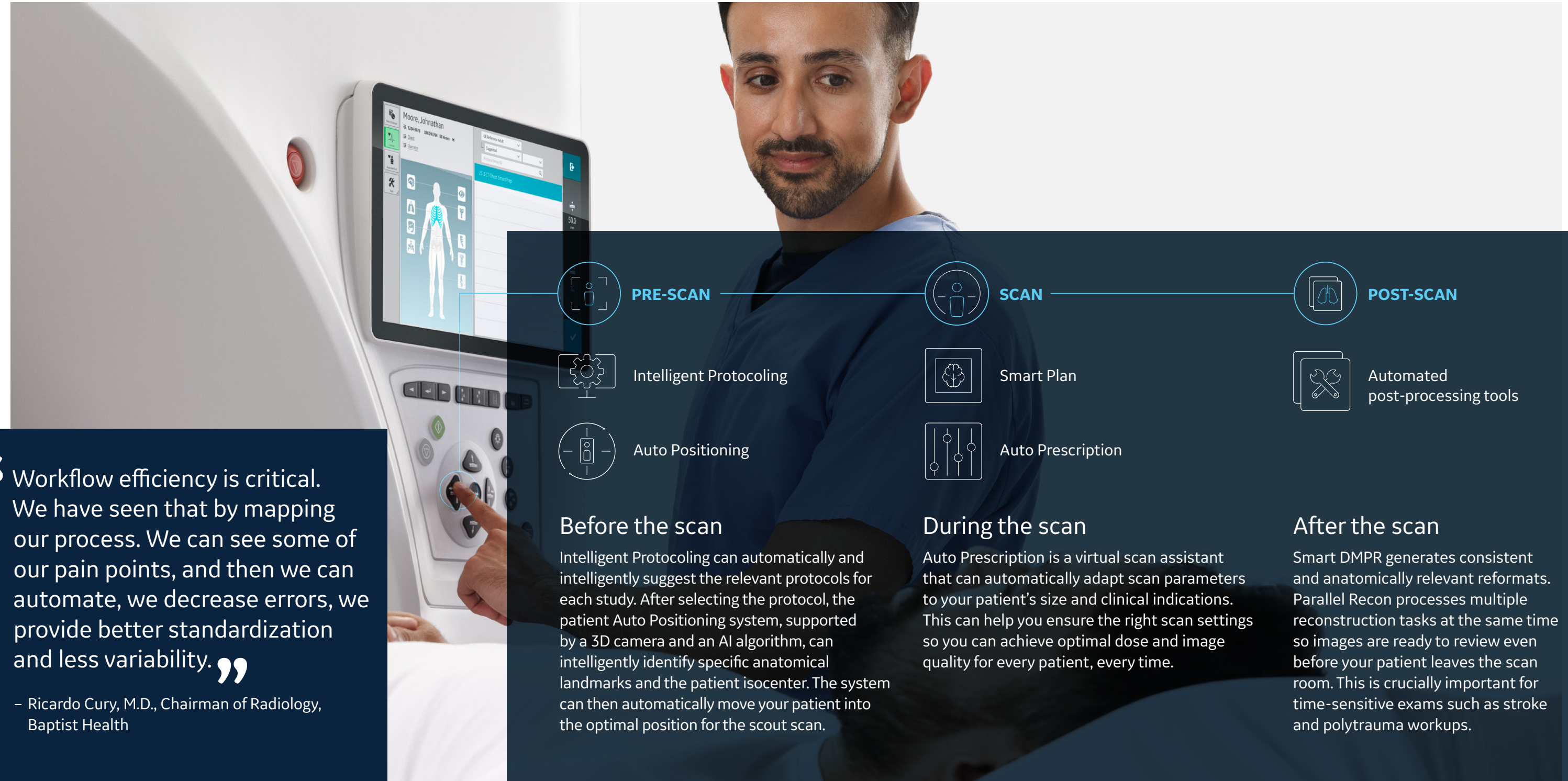
Best-in-class technology Revolutionizing CT from referral to report

We are always seeking out new ways to boost operational efficiency with the goal of making your imaging workflow feel like second nature, possibly even invisible. When it comes to CT, we studied the entire workflow and created solutions to simplify and streamline each step of the process.

These solutions are the core of our Effortless Workflow model, a sophisticated collection of technologies that automate and simplify time-consuming tasks from pre-scan to post-scan. Effortless Workflow takes the CT experience to a new level of speed and precision.

“Workflow efficiency is critical. We have seen that by mapping our process. We can see some of our pain points, and then we can automate, we decrease errors, we provide better standardization and less variability.”

– Ricardo Cury, M.D., Chairman of Radiology, Baptist Health



PRE-SCAN



Intelligent Protocols



Auto Positioning

Before the scan

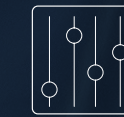
Intelligent Protocols can automatically and intelligently suggest the relevant protocols for each study. After selecting the protocol, the patient Auto Positioning system, supported by a 3D camera and an AI algorithm, can intelligently identify specific anatomical landmarks and the patient isocenter. The system can then automatically move your patient into the optimal position for the scout scan.



SCAN



Smart Plan



Auto Prescription

During the scan

Auto Prescription is a virtual scan assistant that can automatically adapt scan parameters to your patient's size and clinical indications. This can help you ensure the right scan settings so you can achieve optimal dose and image quality for every patient, every time.



POST-SCAN



Automated post-processing tools

After the scan

Smart DMPPR generates consistent and anatomically relevant reformats. Parallel Recon processes multiple reconstruction tasks at the same time so images are ready to review even before your patient leaves the scan room. This is crucially important for time-sensitive exams such as stroke and polytrauma workups.

CLINICAL CARE AREAS

Unprecedented clinical solutions Be ready for anything and anyone

Today's radiology departments have to be ready for everything. Patient volumes continue to grow, cases are growing in complexity and rapid advancements in disease management keep pushing you to expand your imaging service lines. The Revolution Apex platform is designed to provide unparalleled image quality, low dose and exceptional clinical solutions for both routine and challenging cases in all care areas for every patient.

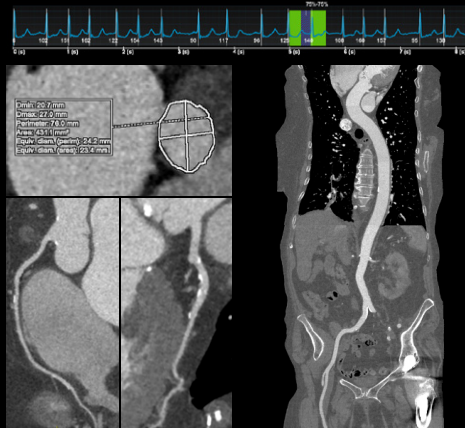


See all that it can do

1-beat cardiac at any heart rate, even in atrial fibrillation, with low dose.



CTTAVI/TAVR planning. Single scan and single injection with low-contrast volume.



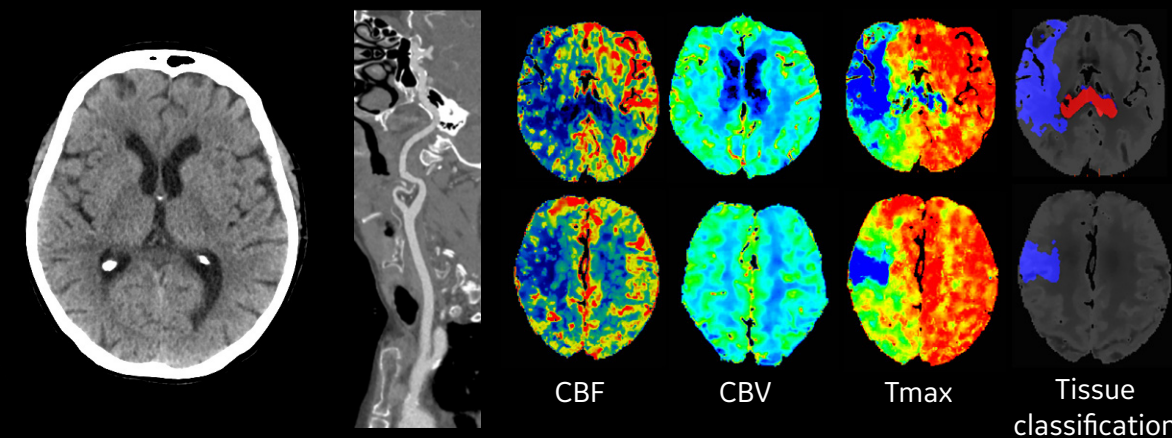
Uncompromised image quality, even for morbidly obese patients.



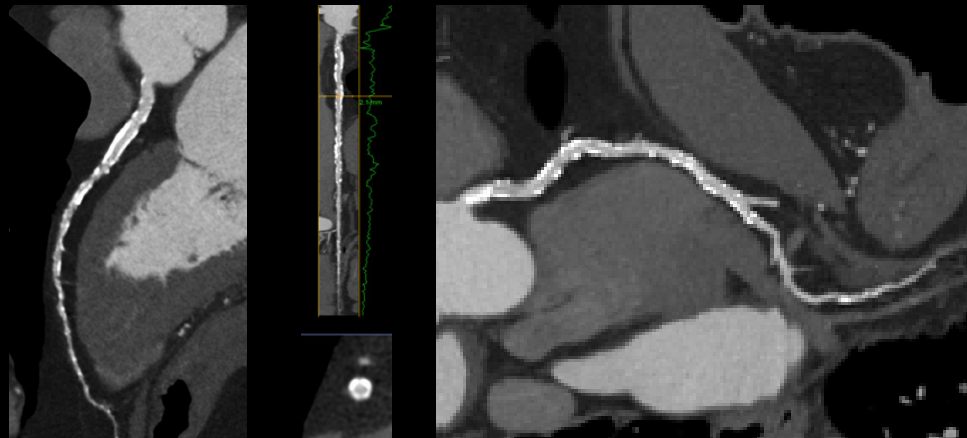
Ultra-fast scanning in a trauma setting while maintaining high image quality.



Rule out acute stroke in less than five minutes.



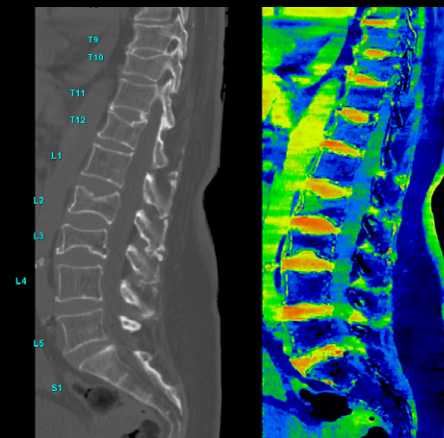
High-resolution imaging, even with heavily calcified coronaries, plaque and stents.



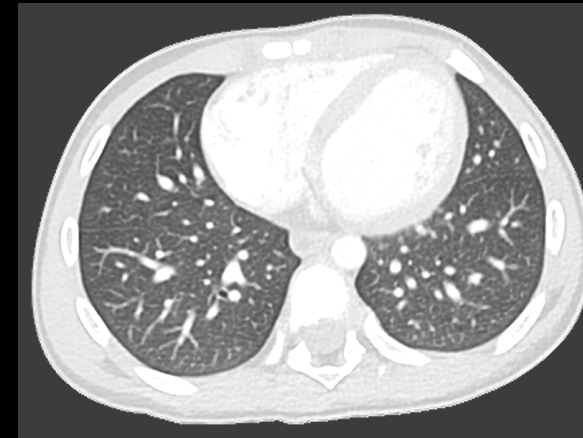
Spectral imaging with speed, even for obese patients.



TrueFidelity with Gemstone Spectral Imaging for bone marrow edema.



Minimal need for sedation or table movement with the lowest dose possible.



Ultra-low dose, ultra-fast. Scan in less than one second with a full 50 cm FOV.



Future-ready platform Get a head start on the future of CT

It's challenging enough to ensure you have the latest CT technologies to support confident diagnoses for your current patients. You also need to keep an eye on the future. That's why we built the Revolution Apex platform with a "future-ready" design philosophy. Our modular Gemstone Clarity Detector is the foundation of this approach. You can start with Revolution Apex Select, which has a 4 cm Gemstone Clarity Detector and 0.28 sec rotation speed. In the future, when you need to grow your service line, you can scale the detector up to 16 cm and upgrade the rotation speed to 0.23 sec per rotation.¹

Our "future-ready" philosophy doesn't stop at your system's hardware. Your Clarity Operator Environment will receive regular updates that can easily be downloaded to your system. The Revolution Apex platform also gives you access to Smart Subscription, the industry's first subscription-based service for CT applications. With the Revolution Apex platform, you don't have to worry about keeping up with technology, because everything you need for the future is already there.



REVOLUTION APEX SELECT Built to perform and then outperform



4 cm detector coverage



0.28 sec rotation speed



Smart Subscription

REVOLUTION APEX PLUS The versatility to see it all



8 cm detector coverage



0.28 sec rotation speed



Smart Subscription

REVOLUTION APEX ELITE Image any challenge and every patient



16 cm detector coverage



0.23 sec rotation speed¹



Smart Subscription

¹Available on Revolution Apex Elite. 510(k) pending at FDA. Not available for sale in all regions.

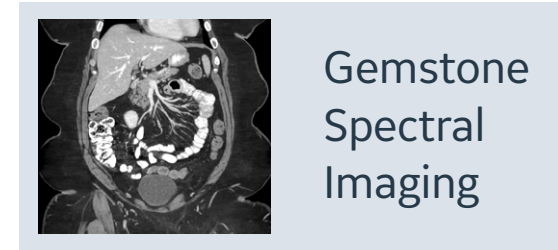
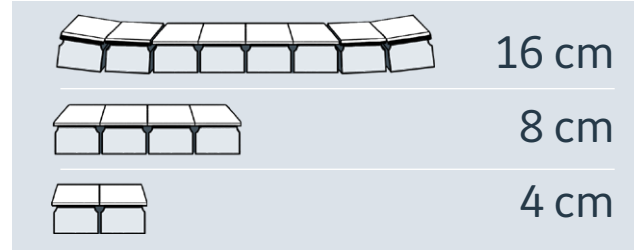
Ready for every future

The communities you serve rely on you to be prepared for anything. They rely on you to have answers to questions that have never been asked. To understand something that has never been seen. And to do it with unwavering confidence and speed. The Revolution Apex platform was built with groundbreaking technologies across the entire imaging chain and an Effortless Workflow model of efficiency to meet the challenges you face today. To make sure you are prepared for tomorrow, we built it with scalable detectors that allow you to take your practice to the next level at any time. The Revolution Apex platform is the powerful, adaptable technology you need to lead CT now and into the future.

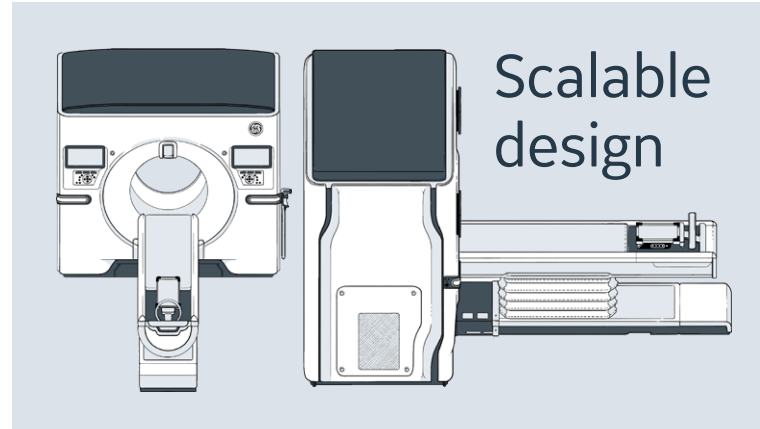


“The scalability makes it easier to run your department without having to move machines every one or two years.”

– Johan de Mey, M.D., Ph.D., Chair of Radiology, University Hospital Brussels, Belgium



Revolution Apex platform



0.23 sec rotation speed¹

One second helical scan with HyperDrive

Effortless Workflow

Pre-scan Scan Post-scan



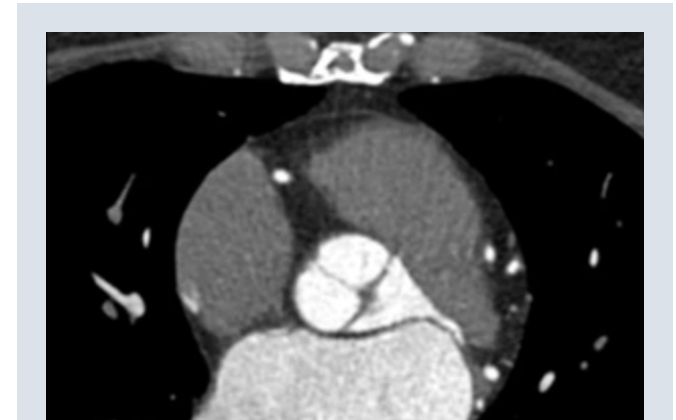
Critical patients



Complex patients



Any patient



TrueFidelity

¹Available on Revolution Apex Elite. 510(k) pending at FDA. Not available for sale in all regions.



Building a world that works

About GE Healthcare:

GE Healthcare is the \$18 billion healthcare business of GE (NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

Follow us on Facebook, LinkedIn, Twitter, and Insights for the latest news, or visit our website www.gehealthcare.com for more information.