GE Healthcare

Make every study exceptional

BrightSpeed

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BrightSpeed^{*} Elite



A new standard in CT

GE Healthcare continues its commitment to delivering high-image quality with lowered dose with the introduction of BrightSpeed* Elite with ASiR. Adaptive Statistical Iterative Reconstruction. ASiR, a new technology, delivers up to 40% reduction in radiation dose along the entire body with no compromise in image quality. With ASiR, the BrightSpeed Elite can deliver scanning performance equivalent to an 8 MHU tube system. In addition to lowered dose, BrightSpeed Elite offers efficiency improvements. An enhanced operator console and table design can improve workflow capabilities.

BrightSpeed

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Maximize throughput with ASiR: capable of long helical scans similar to an 8MHU tube

> Improved comfort, convenience and efficiency thanks to the new console

and table

capacity

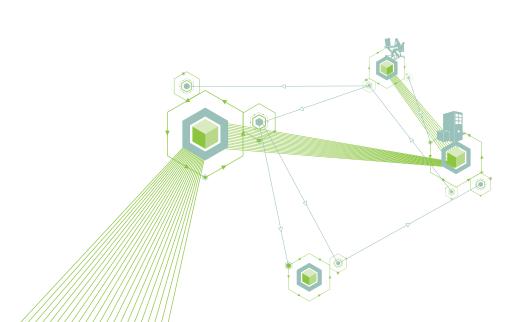
ASiR* technology enables lower dose exams throughout the body

Boost your pitch with IQ Enhance and scan as fast as a 50-slice equivalent CT in a wide range of studies Accelerate acquisition to reporting with faster workflow solutions

Raw data GE Healthcare is working continuously to provide dose reduction and **Conventional CT** image quality Reconstruction improvements. **Photon statistics** and object noise modeling ASIR Iteration 1 Final image Leading the way with image reconstruction, GE has developed a unique algorithm – ASiR (Adaptive Statistical Iterative Reconstruction). Typically, when dose is reduced in CT, image noise and artifact increase, particularly on obese patients. ASiR is not like any conventional filter technique just masking noise, this new engine of CT image reconstruction can help you overcome the problem by subtracting the noise throughout multiple iterations. BrightSpeed Elite with ASiR opens new perspectives by allowing up to 40% dose reduction with no compromise in image quality. The ASiR technique can also enable reduction in image noise for improved image quality and low contrast detectability** (LCD). BrightSpeed

** The dose reduction level achieved will depend on the patient size, exam, and physician preference with specific protocol. LCD is measured with statistical method. Please contact your local sales representative for option availability.

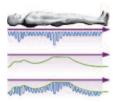
Low Dose High Image Quality





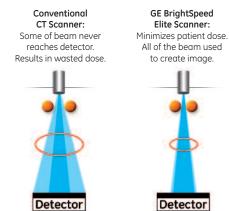
3D dose modulation

BrightSpeed Elite uses a 3D modulation algorithm which automatically adjusts the mA while maintaining the desired image quality, as you scan along x-y-z axes. This allow you to reduce dose up to 40%.



An Optimized Beam

BrightSpeed Elite reduces the dose without post-patient collimation. The beam narrows before entering the patient, reducing the dose and optimizing the beam for image generation.



Bowtie Beam Shaping Filter

The bowtie filter automatically attenuates off-axis rays to maintain a more uniform X-ray field at the detectors. This minimizes dose and reduces X-ray scattering effects.

Color-Coded Pediatric protocols

An intuitive interface for pediatric exams uses color codes to offer the user a selection of protocols tuned in advance to suit the weight of the child.

Dose Report and Prospective Dose Display

BrightSpeed Elite provides an easy-to-archive DICOM-structured dose report. It provides a clear summary of the CTDIvol and DLP parameters, so you can compute the dose received during the scan series.















Increased power

Utilizing ASiR, BrightSpeed Elite can help you to get equivalent image quality compared to a higher mA acquisition, letting clinicians meet a variety of patient and imaging needs.

Maximize throughput

BrightSpeed Elite with ASiR allows you to scan at lower mA, for equivalent image quality. Therefore exams throughput can be increased as stress on the tube & generator is reduced. You can choose to avoid tube cooling so there's less time between exams.

Effectively manage larger patients

With ASiR, you can combine image quality and speed on heavier and larger size patients and still control dose.

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Obese patient, 160 Kg, BMI 54, 370mA with ASiR



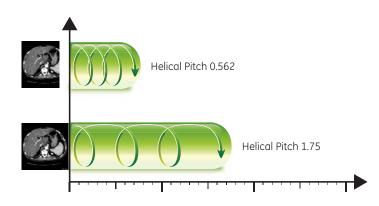
sales representative for

Versatile

50 slice equivalent with IQ Enhance

BrightSpeed Elite includes the best technologies from previous BrightSpeed offerings. The most important is the IQ Enhance algorithm that lets you scan at the same coverage speed as a 50 slice CT. Ultimately, you no longer need to worry about sacrificing image quality for speed. In addition, BrightSpeed Elite can provide you with the flexibility to address critical situations. From head to toe, the BrightSpeed Elite will provide high quality images across a wide range of applications.





With IQ Enhance, BrightSpeed Elite can accelerate helical pitch up to 70%, demonstrating its 50 slice CT equivalent speed.



Angiography

The BrightSpeed Elite routinely performs minimallyinvasive, fast angiography for your patients. Spatial and low contrast resolution allows a detailed study of arterial vascular disease, including calcified plaque and occluded or lumen reduction. The 50-slice CT equivalent coverage speed allows you to catch the arterial phase while maintaining high spatial resolution. Outstanding 3D images, automated bone removal and one click vessel tracking simplify processing and facilitate communication with referral doctors or vascular surgeons.

Abdominal Exams

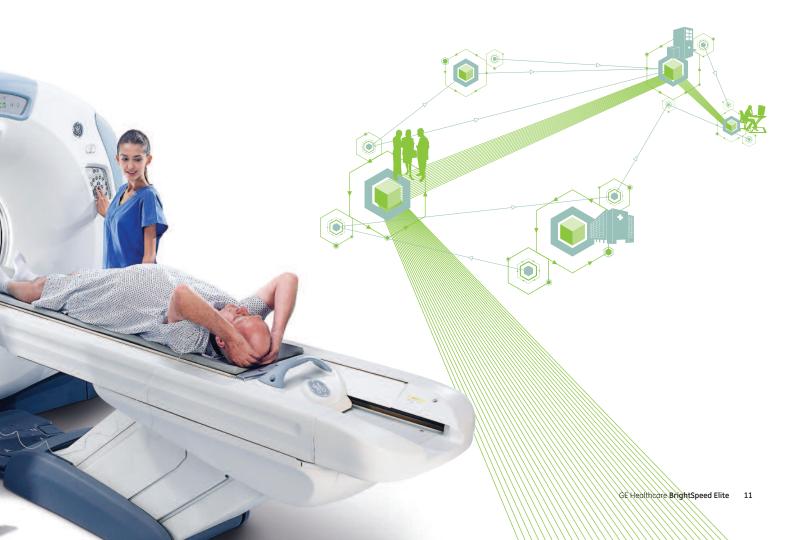
The BrightSpeed Elite has the power, speed and resolution to help you diagnose abdominal disease. This system can also aid in the detection of small lesions or provide a detailed evaluation of tumor extension. It can also provide information to help clinicians characterize lesions through a comparison of arterial, portal and delayed phases.

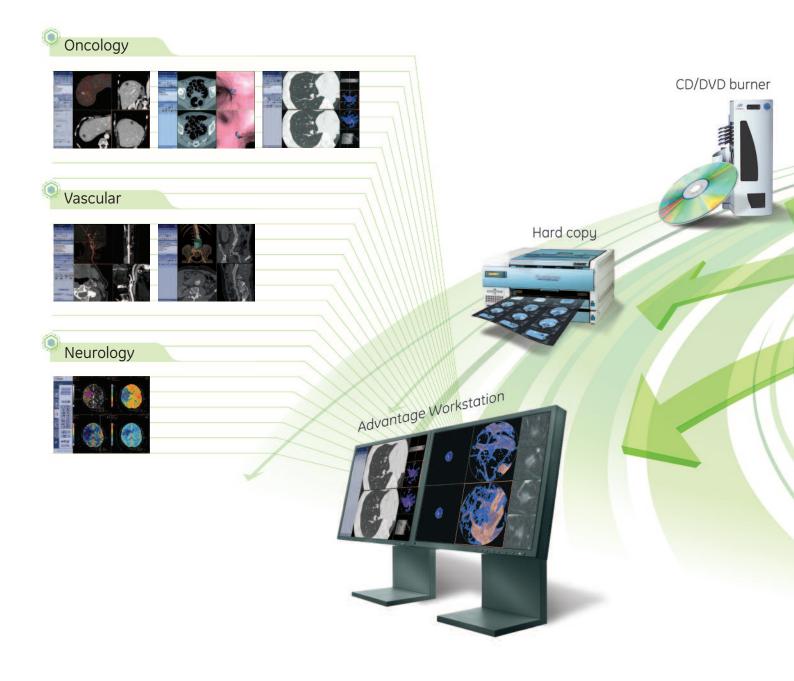
Neuro Exams

A 3D neuro filter reduces noise with no compromise on resolution for an efficient diagnosis. With the filter, the scanner provides up to 20% image quality improvement at the same dose, or the same image quality with up to 36% dose reduction.

Chest Exams

A new chest kernel lets operators perform only one reconstruction for chest exams – and speeds up review. Filter sharpness is automatically adapted to the lung or mediastinum, depending on the selected window width and level. That means optimum image quality for a wide range of studies.





Faster Workflow

To handle the magnitude of today's datasets, BrightSpeed Elite is supported by workflow solutions that accelerate image acquisition, processing and transfer. Workflow is optimized at every step, from acquisition to reporting.



Faster Case Management

The console of BrightSpeed Elite is equipped with the latest in computer technology, including Intel's® Quad-Core CPU. This technology helps to make managing large, thick-slice datasets easy. The simple, user friendly operating console puts automated processing at your fingertips, shortening the overall process. It also features double the storage space of many systems. Thin-slice datasets are also easier to manage with Quad-Core CPU. You can manage thin-slice sets simultaneously without limitation for acquisition, reconstruction and image distribution throughout your facility.

Faster Review

The Advantage Workstation* gives you access to one of the industry's largest selection of customized applications. It equips you with optimized tools at each stage of patient care: diagnosis, pre-therapy planning and follow-up. The Advantage Workstation fulfills your clinical needs of today and tomorrow in vascular, oncology and neurology. It also comes with specific protocols to handle emergency cases efficiently. In addition, you have the option to use these applications from virtually anywhere. RemoteAccess* or AW Server solutions transform many PCs or laptops* into a portable image review solution by allowing concurrent sessions from many locations. BrightSpeed Elite is designed for convenient workflow that simplifies and accelerates image acquisition, processing and transfer. Its ease of use streamlines every step from acquisition to reporting.



Easy to use

Comfort & flexibility

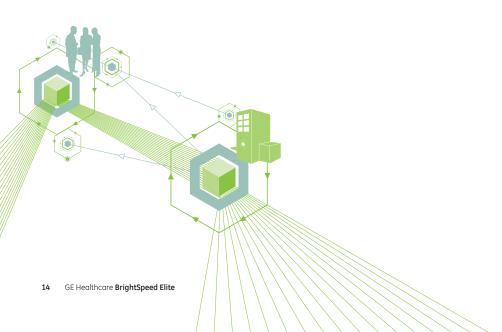
Whether the technician chooses to sit or stand, the BrightSpeed Elite Freedom Workspace offers outstanding flexibility and comfort. The location of the operator console hardware can help decrease noise and heat to enhance the working environment and reduce stress and fatigue.

Convenience

The single, powerful operating console has the same familiar interface as our LightSpeed VCT systems. This interface puts automated processing features at the technician's fingertips. The console also features SmartPrep, Autovoice and easy to create and select protocols.

Efficient positioning

The system also offers improved patient positioning with 227 Kg (500 lb) higher capacity, lower minimum height and an enhanced cradle in/out speed.

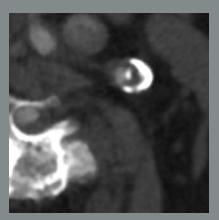


Compact

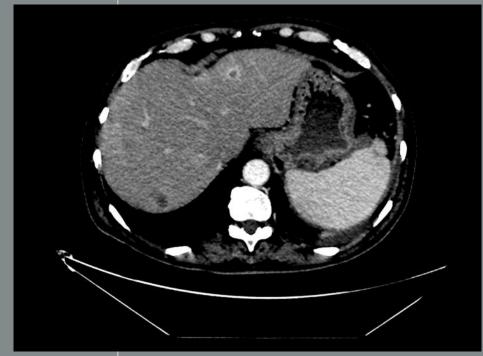
BrightSpeed Elite was designed to be compact; it has one of the smallest footprints in the market. Requiring a minimum room size of 18.4 square meters, BrightSpeed optimizes the speed, power and resolution needed for all types of routine application. 

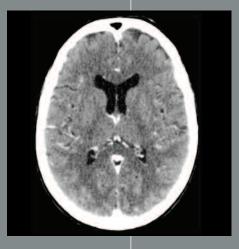
Contrast resolution





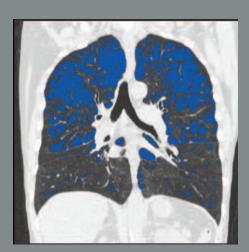
Cross-section focused on calcification and sthenosis.





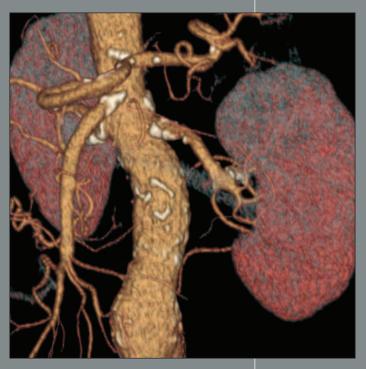


Spatial resolution



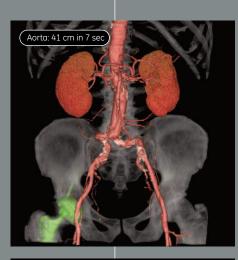








Acquisition speed



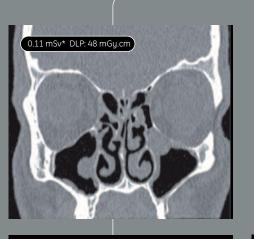


Carotids: 38 cm in 5.5 see



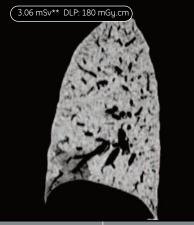






Dose optimization

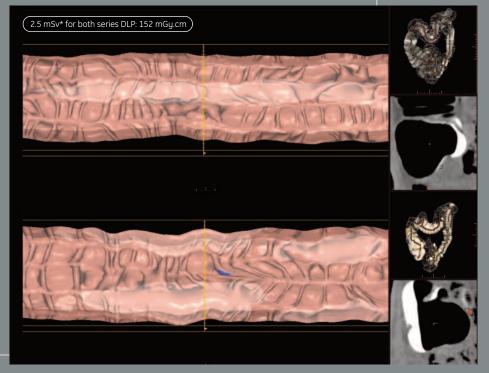
* Obtained by EUR - 16262 EN, using following factors: Head: 0.0023 * DLP Abdomen: 0.015 * DLP Pelvis: 0.019 * DLP ** Obtained by IRCP, using following factors: 5-year old head factor: 0.0040 * DLP 5-year old chest factor: 0.018 * DLP



2.5 mSv* for both series DLP: 152 mGy.cm

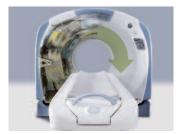








Performix tube



0.5 sec rotation speed



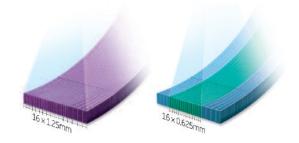
Known for reliability, you can depend on BrightSpeed Elite day after day. The system helps deliver all the information you need in just a few minutes with reduced dose, making a new world of clinical applications possible



Flat table top

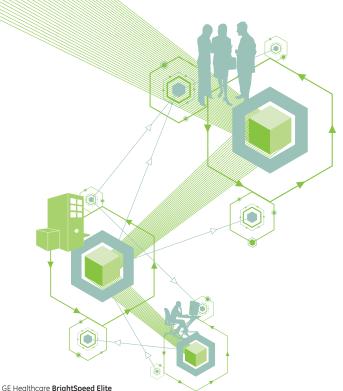






High Resolution Detector

BrightSpeed Elite collects cubic datasets of the smallest practical volume, delivering remarkable image quality in 3D and multi-planar reformatting (MPR) - true 20 mm coverage with 0.625 mm isotropic cells, for resolution as small as 0.35 mm in all directions throughout the body. It can therefore be reproduced at anytime and in all planes.



Proven performance for the future of your CT practice

GE Healthcare Services

Our network of field service engineer and remote capabilities will insure that you get the best out of your BrightSpeed Elite.

Maximizing uptime

- Digital services: Multiply the power of our service engineers, provide our service teams with more time to address your most critical operating issues and help reduce unproductive work. That means you have more time to provide high quality patient care.
- Remote maintenance: On our systems connected to the GE technical centers our on line engineers can perform a variety of maintenance operations without sending an engineer on site like analyze hardware malfunctions, repair software errors, conduct proactive monitoring of the overall system
- Diagnose and fix your system fast: Self check systems built into the system are directly connected to our technical centers. On line services let us resolve most of the issues and provide you with a clear status of your system. Within a short time your call is transferred to an on line engineer. Faulty parts identified pro actively and ordered through remote services typically arrive even before your field engineer so you can stay on schedule.

Simplify your access to service

- ilinq* your direct connection to GE Healthcare support. GE iLinq services help save you precious time. At the touch of an on screen button you can request technical or application support and obtain quick assistance. ILinq can be activated through a key on your Brightspeed console as part of your GE service contract.
- Enabling better asset management. To help ensure maximum scanner efficiency and productivity, GE also provides **SiteWatch** asset management tool for accurate reporting and analysis of your activity.
- AppsLinq*, a live clinical application support and training solution, delivered remotely. This solution provides a customized, cost efficient way to provide the necessary education to imaging operators. You will benefit of a wide spectrum of solutions to fit your needs like:
 - A live expert to increase confidence and introduce excellence in complex exams
 - Customized training session to best fit the day's busy schedule
 - Instantaneous support to avoid flow disruptions

Please contact your local sales representative for option availability.

More from your network

A wide range of tools provides additional learning opportunities for your imaging professionals on the advanced imaging capabilities of the BrightSpeed Elite with skill and finesse.

Physician and Technologist instructed CT Masters series

A comprehensive range of courses, in Advanced CT Applications, taught by experts in the latest technologies.

On-site training

To help ensure maximum scanner efficiency and productivity, GE also provides iCenter[™] asset management tools for accurate reporting and analysis.

TiP* Virtual Assistant

For application support, the TiP Virtual Assistant provides your staff with interactive real-time training and support right on the console from a dedicated and experienced team of application specialists. Data subject to change. Marketing Communications GE Medical Systems Société en Commandite Simple au capital de 63.875.865 Euros RCS Versailles B 315 013 359 A General Electric company, doing business as GE Healthcare

*Trademark of General Electric Company

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About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world. Headquartered in the United Kingdom, GE Healthcare is a unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employees are committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com.

GE Healthcare Chalfont St.Giles, Buckinghamshire, UK

