

Excellence & Technology Report



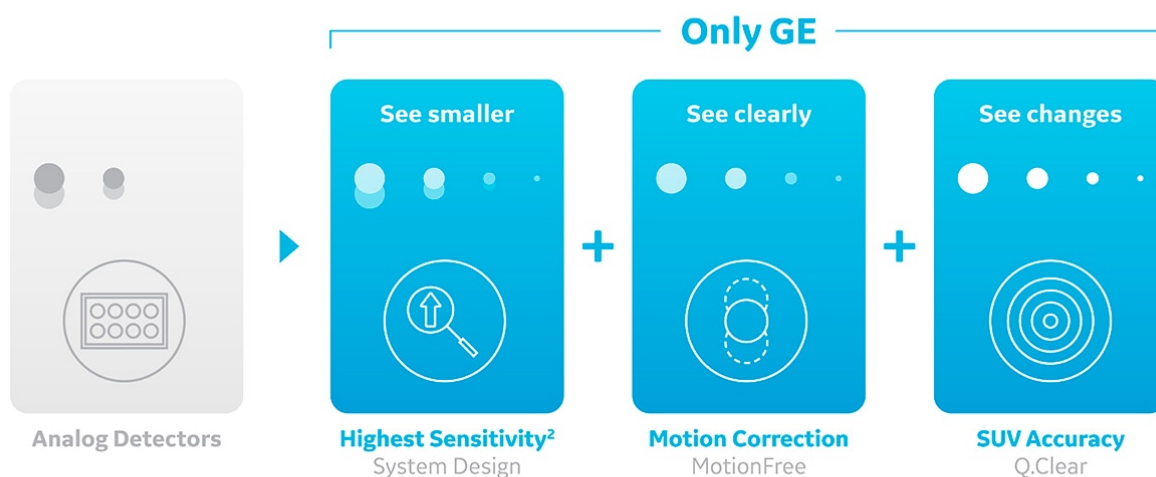
Discovery IQ PET/CT Scanner System at ST Diagnostic PET Centre- INDIA

The next generation of the world's most trusted PET/CT Scanner

Discovery™ IQ is the most widely utilized and trusted PET/CT system amongst clinicians across the globe¹. It was designed and engineered to be a scalable, high-performance diagnostic system with the capabilities to produce exceptional image quality while using less dose. Most importantly, it was built on a platform intended to meet and exceed your clinical needs as they grow. To continue that momentum, we're introducing Discovery IQ Gen 2. The next generation in PET/CT performance dedicated to improving your clinical outcomes, productivity and profitability.

Built upon the strongest foundation of performance

Discovery IQ Gen 2 builds on the standard of PET/CT performance set by Discovery IQ through powerful software and hardware upgrades designed to further personalize your patient care. While maintaining the industry's highest NEMA sensitivity², Discovery IQ Gen 2 delivers improvements to the other two core pillars of excellent PET/CT imaging - motion correction and quantitation accuracy. Motion Free can provide every patient the benefit of reduced motion in their images, while more accurate quantitation tools will help produce greater image quality for better patient outcomes. Additionally, the re-engineered hardware enhances the technologist and patient experience. One such example is new remote landmarking and table positioning with Auto IN, which keeps the technologist at the console, potentially reducing their radiation exposure. Along with an improved user interface for exam reporting and a smaller footprint, Discovery IQ Gen 2 provides a great opportunity to invest in the world's most trusted PET/CT platform for your molecular imaging requirements.



Sensitivity

The highest sensitivity to your greatest needs

Discovery IQ Gen 2 reinforces what the highest sensitivity can do for your image quality. Built with a combination of the highest NEMA sensitivity², the highest clinical NECR² and outstanding field-of-view coverage, this PET/CT system has exceptional small lesion detectability. Amongst these industry-leading capabilities, Discovery IQ Gen 2 also features Smart MAR, which helps reduce metal artifacts, providing significant reduction of streaks and shadows to save time from correcting images. It is imaging in the highest sense, using low dose and faster acquisition times to acquire high-clarity images like no other PET/CT system.



Highest NEMA sensitivity in the industry²



Highest clinical NECR for clinical ¹⁸F in the industry²



May reduce dose by keeping the technologist at the console³



Significant reduction of metal artifacts with Smart MAR



Enhanced patient care, comfort and satisfaction



Large, scalable
field-of-view



Motion Correction

Clear the way for clear images

Respiratory motion negatively affects about half of all PET/CT procedures. Current gating solutions are cumbersome and take too long to set up, which puts you in the difficult position of having to pick and choose which situations to use it in. As a result, only a small percentage of overall procedures affected by motion receive the benefits of motion correction. However, now with Motion Free, Discovery IQ Gen 2 assures that every patient gets the benefit of reduced motion during their exams for exceptionally clear images.

Motion Free

Motion Free is the first-ever digital respiratory motion management solution that completely eliminates the need for a gating device. It continually monitors respiratory motion in every PET/CT procedure, automatically modifies the scan and then integrates what it learns into the final image in real time. Motion Free is the new standard for PET imaging and an essential tool for better outcomes.



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Up to a 30 percent improvement in quantitation accuracy (SUV_{mean}) compared to non-motion corrected data⁴



•
Up to a 67 percent improvement in lesion volume measurements⁵



•
Avoid adding up to 11 minutes to patient setup time compared to an external gating device⁶



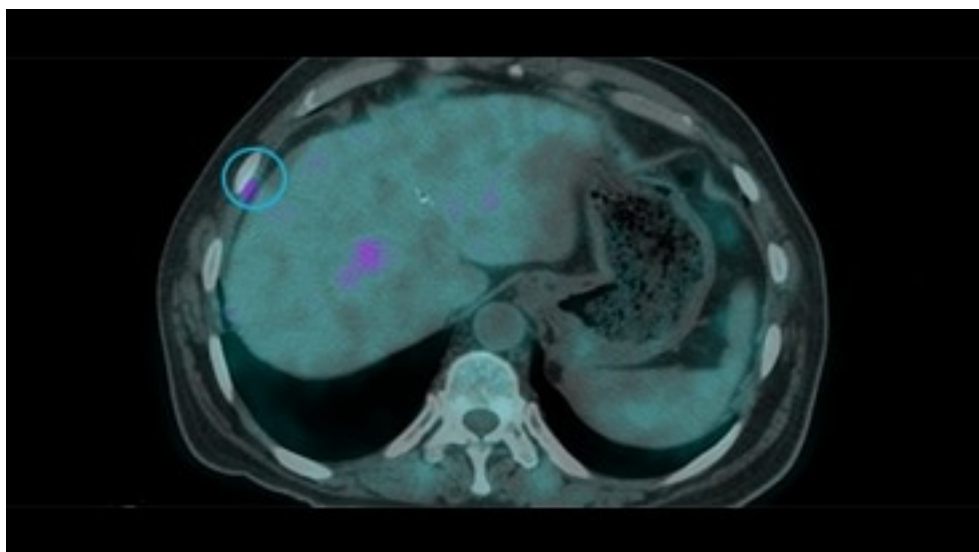
Quantitation

Accurate data points to trusted treatment

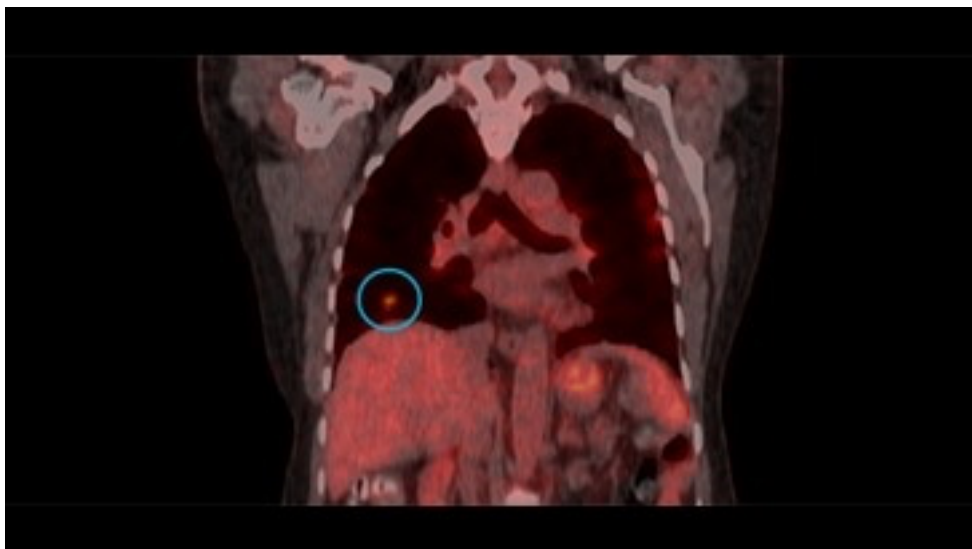
With Discovery IQ Gen 2, your quantitation is no longer limited by the technologies used to produce it. Compared to conventional methods, Discovery IQ Gen 2 uses more accurate and consistent quantitative tools like Q. Clear to support your treatment with precise data points. This allows your SUV measurement to become more than a number. It becomes a tool for trusted clinical discovery, diagnosis and treatment assessment.

Q. Clear

Since its introduction, Q. Clear has delivered fast and efficient quantitation readings for confident diagnosis and precise treatment response assessment by providing up to two times improvement in both PET quantitation accuracy (SUV_{mean}) and image quality (SNR). Now, improvements in the Q. Clear algorithm are further enhancing the resolution of brain images in vertical/coronal planes.



Motion Free
SUV_{max} 4.92
Volume 3.81³



Motion Free
SUV_{max} 7.03
Module: Volume 6.93³



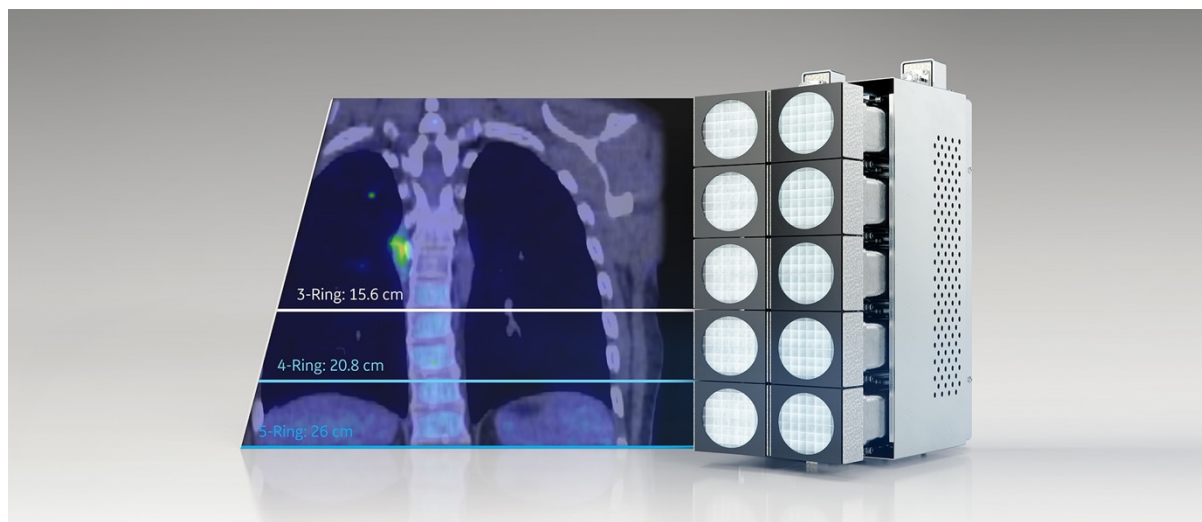
Motion Free
SUV_{max} 3.07³



Up to a 2x improvement in image quality (SNR)



Up to a 2x improvement in quantitative SUV (SUV_{mean})



Technology

Detection at the speed of light

Discovery IQ Gen 2 comes with the Light Burst PET Detector that reduces scan times and dose amounts in half⁷. Combined with the next-generation improvements in sensitivity, motion correction and quantitation, you can expect increases in the image clarity, the speed that you acquire images and the confidence you have in seeing smaller lesions. We paired this innovative detector technology with the Optima™ CT540, which has the equivalent speed of a 50-slice CT with IQE 1.75 pitch booster⁸ to meet your imaging needs. The Light Burst PET Detector is compatible with advanced digital solutions designed to connect machines, people and data through a portfolio of healthcare analytics applications.

ACCESSIBILITY

Better outcomes for all

Healthcare providers need a cost-effective system that has the flexibility to evolve with the demands of its users and accommodate for future growth. Discovery IQ Gen 2 is made for this. It is an accessible, mobile-ready platform designed with a fully-scalable detector ready to meet the clinical needs of all.



Experience

A system designed around you and your patients

The Discovery IQ Gen 2 improvements don't stop with high-performance software upgrades. Now with a smaller footprint, Discovery IQ Gen 2 also offers hardware enhancements that may reduce radiation exposure to technologists and improves the user interface for exam reporting. Combined with the latest software upgrades, this allows for a better technologist and patient experience while enabling a powerful boost in PET/CT productivity and performance.

Auto IN Auto IN gives your technologists the ability to landmark and position the patient table from the console in the operating room. Not only does this improve the imaging workflow, but it may reduce your technologist's exposure to radiation by keeping them at the console





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May reduce technologist radiation exposure and improve workflow³

Table positioning and landmarking from the console



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Improved user interface

Easy-to-use PET exam reporting and retrospective reconstruction



• **Up to six minutes less radiation exposure per day**

Up to two hours of reduced radiation exposure per month



• **Up to 10 percent reduction in total scan time**

Scan two more patients each day

Summary

The next generation is here Discovery IQ is the next generation of our high-performance PET/CT system thoughtfully engineered with faster scan times, **lower dose techniques** and the ability to scan patients of all sizes. By combining best-in-class sensitivity with Motion Free image clarity and trusted Q. Clear quantitation, Discovery IQ Gen 2 is the smartest choice for ensuring better outcomes through true discovery at **ST Diagnostic PET Centre in INDIA** till Date.

