GE HealthCare

Definium™ Pace Select digital X-ray system

Definitive insights. Exceptional experience.

No shortage of X-ray challenges

X-ray is often the first touch in patient care, and it makes up over 60% of imaging procedures.[1] But as important as it is, currently running an X-ray department is proving difficult for many reasons.

It starts with staffing

X-ray technologists are hard to find. A recent survey by a staffing company cited that 80% of healthcare provider organizations surveyed were shorthanded, and the job title with the most unfilled positions was radiologic technologist.[2] In the same study cited above, 46% of the organizations surveyed named burnout as a major healthcare staffing challenge.[3] Add to that the fact that more than 70% of radiographers experience work-related injury[4], and you can see why building and keeping an X-ray team can be daunting.

What's X-ray up against?

Facilities that want to validate their purchasing decisions also want to keep unnecessary costs down, but challenges get in the way. The top two outlook factors are that respondents feel their X-ray capacity is "sufficient to meet anticipated patient volumes" and "concern about reimbursement reductions".[5] This last concern may put a squeeze on the funds available for purchasing fixed X-ray systems. Repeated and rejected X-rays also effect costs. Typically caused by variability in patient positioning and exam setup, they can reach as high as 25%.[5] Their effect on the department is not only to raise costs but to increase technologist workloads which are already problematic.

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#1

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of radiographers experience work-related injuries[4]

Up to 25%

of images can be rejected[6], creating more work which fuels staff burnout

We’re here to help you win

Definium™ Pace Select is the tool your X-ray department can use to conquer today’s challenges. This versatile, digital radiographic floor-mounted system is available at a value price point, yet it can produce consistent, high-quality images typically generated on premium systems. This image quality can be easily achieved—even with novice technologists operating the system—thanks to a combination of hardware, software, and assistive technology.

Easy positioning for all exams

Designed for ergonomic operation and clear positioning, the manual tube stand features 5-axis movement capability and SID (source-to-image receptor distance) indication.

Empowering technologists of all experience levels

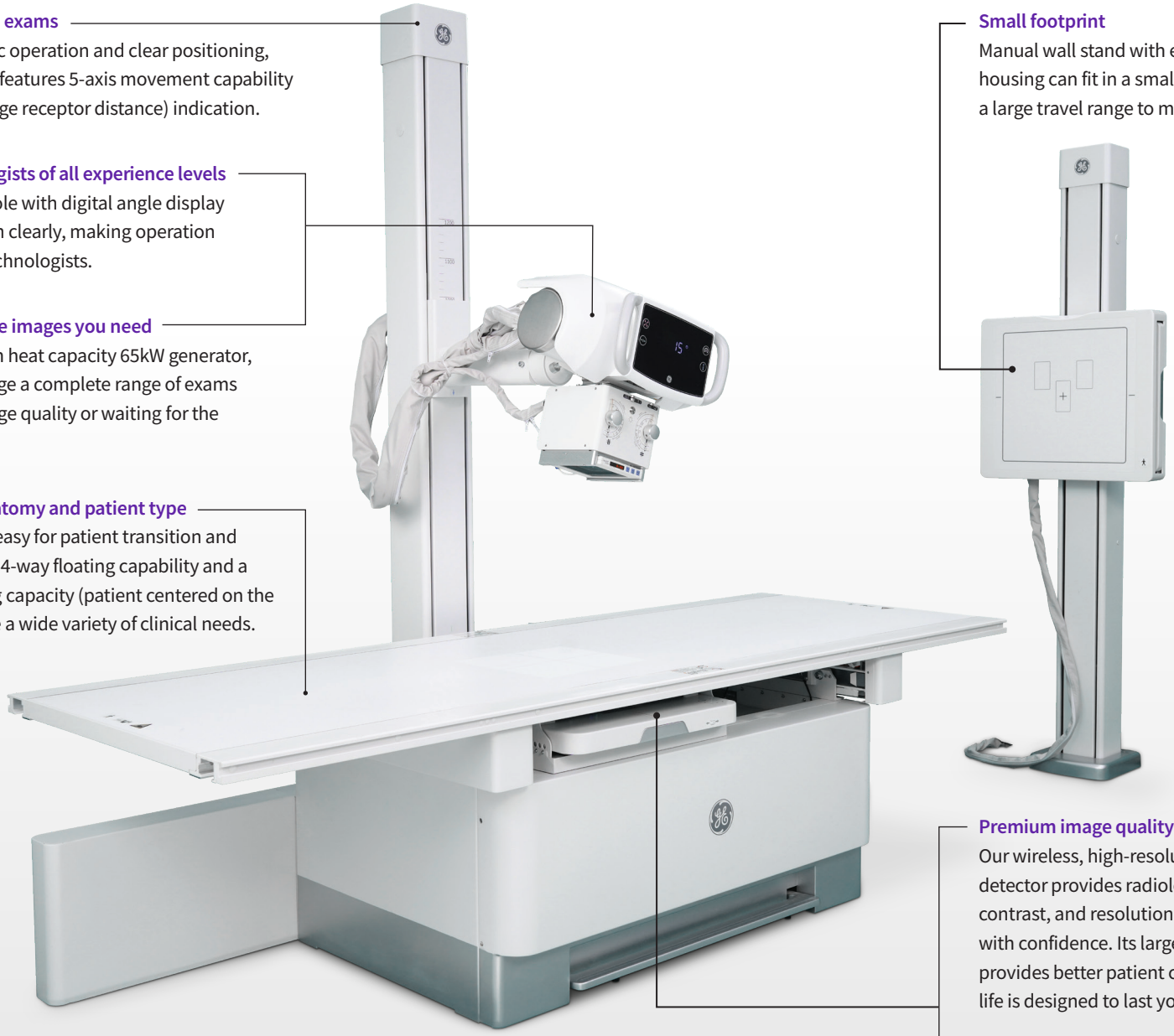
Digital tube head console with digital angle display shows the tube rotation clearly, making operation simple for even new technologists.

Powered to capture the images you need

With a high-power, high heat capacity 65kW generator, you can effectively image a complete range of exams without degrading image quality or waiting for the system to cool down.

Coverage for every anatomy and patient type

Flat tabletop design is easy for patient transition and routine cleaning. It has 4-way floating capability and a 220 kg (485 lbs) loading capacity (patient centered on the table) to accommodate a wide variety of clinical needs.



Small footprint

Manual wall stand with easy-to-move detector housing can fit in a small sized room, and provides a large travel range to maximize patient coverage.

Premium image quality

Our wireless, high-resolution FlashPad™ Select detector provides radiologists with the clarity, contrast, and resolution to make clinical decisions with confidence. Its large size (43 x 43 cm / 17 x 17 in) provides better patient coverage, and the long battery life is designed to last your entire day.

No physical grid required

AutoGrid software provides equivalent image quality as a physical grid without the physical effort.[7] With three modes and three strengths, it is designed to reduce scatter radiation under different scenarios.

An emphasis on easy

A high-powered X-ray generator and a large, high resolution FlashPad™ Select detector are the key components that enable imaging a complete range of anatomies and patient sizes. What's even better is that the system acts as a personal assistant for technologists to help with protocol and exposure factor selection, positioning of the system, and with making quality checks before images are sent to radiology. AutoGrid software eliminates the need for technologists to make choices about the use of physical grids while providing X-ray scatter noise reduction. AI-driven Helix™ advanced image processing software provides consistent image quality despite variations in exam conditions with customized image looks that radiologists demand.

With a simple, easy-to-learn and operate design, the system can help prevent technologists from making mistakes and also efficiently deliver imaging exams that impart clinical confidence. This can help lower staffing burdens and reduce rejects and repeats. And all of these benefits come with a low total cost of ownership.

Fewer rejects and repeats

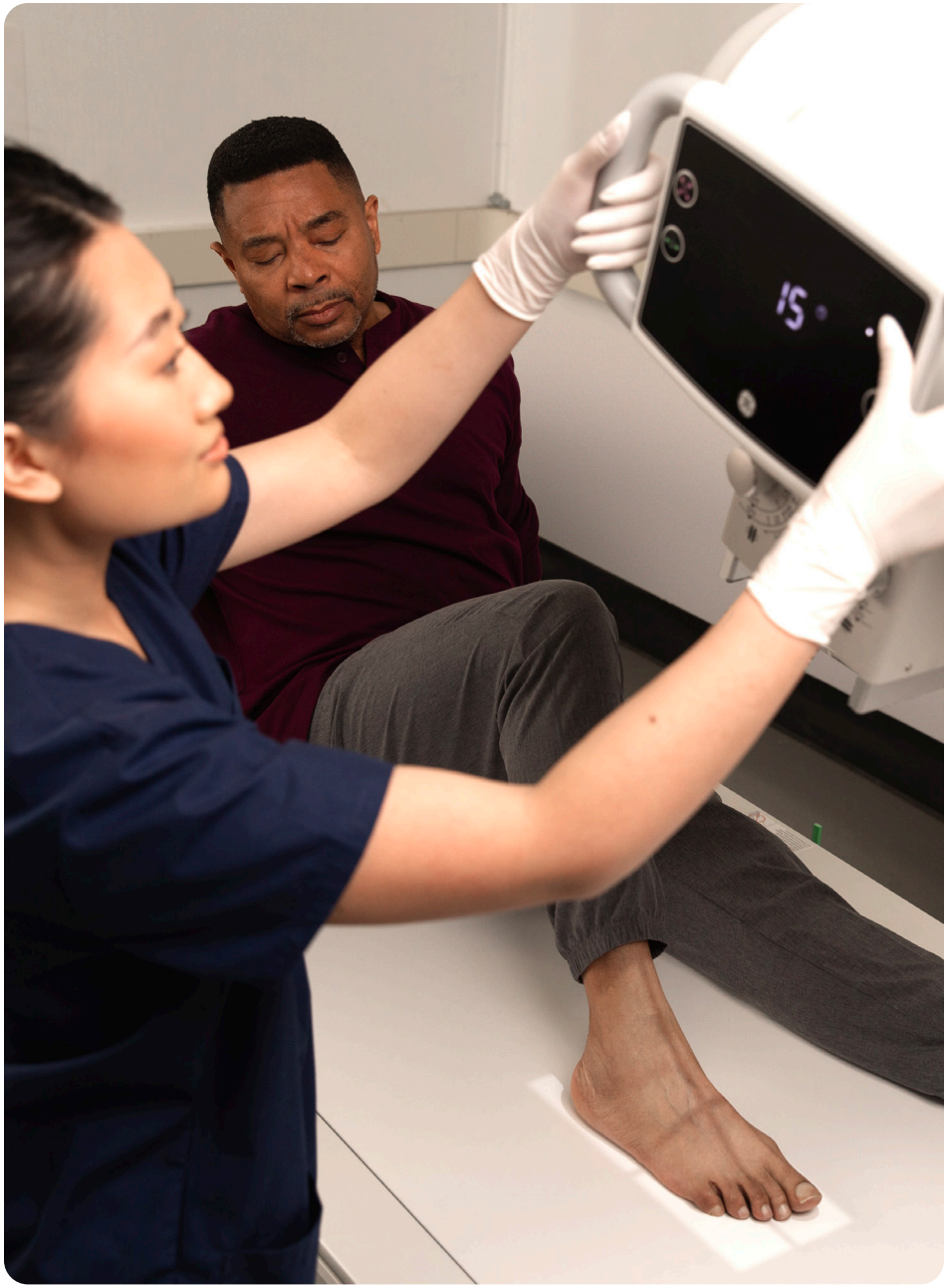
If you pare X-ray down to what matters most, it's image quality. That's because the quality of an X-ray image directly influences diagnostic accuracy and the follow up management of the patient. To help you get high quality images that meet with radiologist approval, we've designed the Definium™ Pace Select with high-end features not typically available at this price. These features can reduce rejects and repeats by promoting high-contrast, high-resolution, low-noise images with minimal artifacts.

GE HealthCare imaging chain software and large, efficient high-resolution FlashPad™ Select Detectors

Our high-power, high heat capacity 65kW X-ray generator combined with a large, efficient, high-resolution detector can provide premium image quality for every anatomy and patient type. At 100 micron pixels the FlashPad Select detector provides 4x higher resolution than 200 micron pixel detectors, helping to distinguish fine structures.

AutoGrid software

A unique GE HealthCare offering, this is software that functions like a physical grid during image processing, producing equivalent contrast and image quality.[7] The advantage is that unlike a physical grid that costs extra money, can be lost or damaged and must be physically moved, selected, and attached by the technologist, AutoGrid requires no physical effort. Selection errors are also eliminated because the software knows the imaging conditions.



Automatic Exposure Control (AEC)

Helps provide a consistent optical density/signal-to-noise ratio between images, regardless of patient-centric factors such as size and density.

Helix™ 2.2 advanced image processing

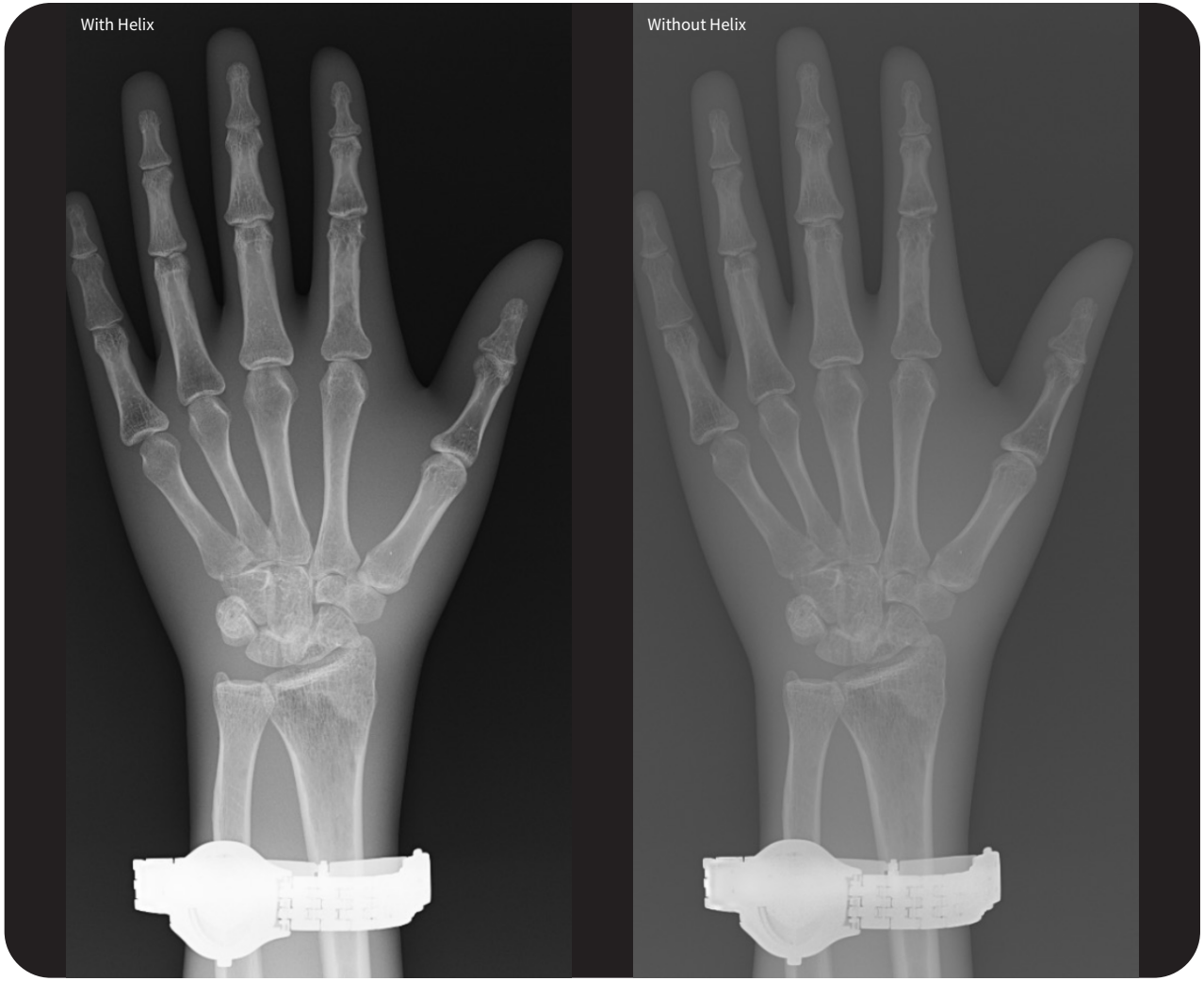
This AI-driven software includes key algorithms that help deliver consistent, high-quality images regardless of variations in dose, patient positioning, field of view, or metal.

- **AI-driven automated brightness and contrast (AIBC)** delivers improved consistency despite variations in exposure technique and challenging exam conditions.
- **Detail Preserving Noise Reduction Filter (DPNR)** reduces noise, while minimizing the effect on fine details.
- **Local Contrast Enhancement (LCE)** delivers improved contrast for chest, ankle joint, foot, and patella images.

Applications for custom image looks

These tools provide radiologists with the insights needed to efficiently select optimized image looks for their site.

- **Real-time IP Looks** – Allows for faster and easier fine-tuned customizations.
- **IQ Compare** – Allows for simultaneous viewing of the standard and customized looks to simplify comparisons between the different options.
- **QuickEnhance** – Provides one-touch reprocessing of images with a custom look.



All kinds of technologists. One kind of image.

No two patients, technologists, or facilities are alike, yet every time an X-ray is taken, a common result is expected: a high-quality diagnostic image. Plus, there are many thousands of possible combinations of exposure factors, patient positioning, and equipment positioning that a technologist must get right to create a good image. This can be a challenge when trying to capture the consistent images radiologists demand. GE HealthCare was thrilled to take on the challenge of ensuring consistent X-ray results in a world of variability. Our solution was to give the Definium™ Pace Select assistive technology and an intuitive workflow that requires minimal application training. The result is a system so easy to use that even novice technologists can operate it effectively, getting the image right on the first try.

Clear Positioning Indication

Easy visual indicators of angulation and source-to-image receptor distance (SID) help optimize image creation. With SID indication on the tube stand column to show SID with the table receptor and two indicators to facilitate position with the wall stand receptor, technologists are better equipped to get the imaging conditions to match those required by the protocol.

Auto Protocol Assist (APA)†

This innovative software automatically selects the correct exam protocol and exposure factors, reducing the physical and mental workload on the technologist while providing image consistency across technologists.

Easy Common User Interface (UI)

A simple and familiar interface allows technologists to quickly get up and running with the system and easily move between different GE HealthCare X-ray systems.

Quality Care Suite 1.0†

This on-device solution includes AI algorithms includes on-device AI algorithms that perform automated quality checks for protocol mismatches, clipped images, and incorrectly hung images to fix problems before images are sent to the radiologist.

- **Intelligent Auto Rotate** – Automatically rotates images that are hung the wrong way.
- **Intelligent Protocol Check** – Conducts an automated quality check to detect errors on the acquisition system, such as improper protocol used.
- **Intelligent Field of View** – Detects when a lung field is clipped in a frontal chest X-ray and allows technologists to determine if a repeat is required before sending the image

An X-ray system that's got your back

We've designed the Definium™ Pace Select with a low total cost of ownership (TCO) so no matter your volume or reimbursement, you'll realize a strong return on your investment. TCO is highly influenced by how often the system is down, how long repairs take, and how much repairs or a service contract cost. To ensure value, Definium Pace Select is:

Built for the long haul

The complete system is tested to safeguard seamless operation of all software and hardware components together. Individual components are tested for structural stability and operational functionality under demanding conditions that exceed weight, force, and repetitive operational requirements that the equipment would face over the expected product lifetime.

Built for high uptime

If your system does go down, we can help you get back up and running quickly. Confidently rely on highly trained experts that can provide 24-hour troubleshooting and repair with access to a strategic global network of parts warehouses that ship over 6,000 spare parts daily.

Built for cybersecurity

You can securely download the latest quality and cybersecurity patches to safeguard Protected Health Information (PHI) and Personal Information (PI). Barriers to unauthorized access include antivirus and intrusion detection, Information protection, audit logging, and identification and authentication.

Built for higher utilization

iCenter™† analytics helps you visualize usage and get the most out of your system.

GE HealthCare

About GE HealthCare

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrated solutions, services, and data analytics to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing personalized, connected, and compassionate care, while simplifying the patient's journey across the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharmaceutical Diagnostics businesses help improve patient care from prevention and screening, to diagnosis, treatment, therapy, and monitoring. We are an $18 billion business with 51,000 employees working to create a world where healthcare has no limits.

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

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† Denotes optional features

Definium Pace Select is not commercially available in all markets. Products mentioned in the material may be subject to government regulations and may not be available in all countries. Shipment and effective sale can only occur after approval from the regulator. Please check with local GE HealthCare representative for details.

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