



# Sustainable molecular imaging solutions for a resilient tomorrow

Omni Legend







# Creating a more sustainable future requires we care for the planet and its inhabitants.

It is essential that we continue to drive progress toward early, precise, and accessible diagnosis and treatment of more patients. For the planet, it is critical that we do so with a reduced impact on precious and rare resources that are imperative to life. We believe that the advancement of precision health, greater digitization of healthcare, and increased access to quality care are fundamental to accomplishing this goal.

We support carbon policies that reduce greenhouse gas emissions and promote sustainable development. We are committed to achieving net zero by 2050 and are part of the UN-backed “Race to Zero,” with a goal of reducing emissions based on the Paris Agreement. We’ve also set a public goal to achieve a 50% reduction in our own operational emissions by 2030. As a result of these efforts, we want to enable a more sustainable health system by addressing not only the environmental impacts of our products but also the challenges healthcare professionals and their patients face with resilient, digital options.



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**We deliver sustainable, intelligently efficient solutions for a resilient tomorrow.**

Building a healthier world to help improve access to care and enable better patient outcomes.



**Green**

Using fewer resources for a healthier planet.

**Digital**

Transforming healthcare through innovation.

**Resilience**

Building flexibility and dependability across healthcare systems.



## Omni Legend helps create a resilient tomorrow



Our Omni Legend PET/CT system and its services help ensure that radiology professionals and the patients they serve have the technology necessary to create a sustainable and resilient tomorrow.

### Reducing environmental impact

- The new, multi-directional, upgradable platform design has the potential to expand in each of the core dimensions of PET/CT imaging, including axial field-of-view, digital detector technology, software, CT capabilities, and imaging of new tracers — potentially extending the lifespan of the system.
- Reduce energy consumption by up to 50% when using the standby power mode, when idle.<sup>1</sup>
- 94% of materials used in the system are recyclable.

### Improving outcomes

- With the ability to image the diagnostics portion of theranostics as well as short-life tracers and dynamic protocols,<sup>2</sup> you're empowered with greater clinical information across more procedure types than ever before.
- Excel in PET/CT operational efficiency with a collection of intuitive workflow solutions, enhanced by artificial intelligence, to help deliver answers at the speed of sight.
- Improves overall patient experience with features like LED ambient lighting to create a calming mood, as well as a graphic pattern on the upper area of the bore to help in both in both alleviating stress and reducing movement for nervous patients.



<sup>1</sup> Compared to the same system not using standby power mode.

<sup>2</sup> Short-life tracers such as Rubidium-82 used in PET cardiology scans. For dynamic protocols such as Whole Body Dynamic Acquisition, the Dynamic IQ processing application is required. Dynamic IQ is CE marked. It is 510(k)-pending with the U.S. FDA. Not cleared or approved by the U.S. FDA. Not for sale in the U.S.



# Contributing to a healthier planet

**More than half of the healthcare sector’s climate footprint, approximately 53%, is attributable to energy use.**<sup>3</sup> As a result, we have strengthened our commitment to environmentally conscious design and sustainable practices across our product manufacturing, sourcing, distribution, installation, and service operations. This includes improving energy efficiency, optimizing the use of limited or rare materials, providing digitally enabled and remote predictive and maintenance service throughout the product lifespan, and offering refurbishment and recycling options at the end of product life.

**GE Healthcare environmental management system is ISO 14001 certified**

Our production and service operations align to ISO 14001 standards.

**We’re committed to environmental product design**

This product conforms with IEC60601-1-9:2007. REACH (EC) 1907–2006

## Materials

GE Healthcare reviews the environmental aspects of the material supply used within our products to increase recyclability and decrease the use of hazardous substances, when possible.

### Recyclable

We’re committed to high recyclability of our products and reuse when possible.

94% of materials used in the system are recyclable.

When we build a replacement X-ray tube for the Revolution Frontier Gen 3, 47% of the mass of the X-ray tube is reused, enabling savings on energy and natural resources.

### Reduce the use of hazardous substances

EU RoHS directive 2011/65/EU

<sup>3</sup> Health care climate footprint report | Health Care Without Harm (noharm-uscanada.org)



## Packaging

### Improved packaging

Packaging is a mixture of wood and corrugated cardboard. The package is fully recyclable.



## Product utilization

Our imaging products are designed to help enable energy efficiency through dedicated features and advanced applications to reduce the environmental impact.

### Ergonomically designed

#### Patient setup and positioning

Innovative Auto Positioning feature creates a hands-free positioning experience.

MotionFree digital respiratory motion correction avoids adding up to 11 minutes to patient setup time compared to an external gating device.<sup>4</sup>

#### Reduce staff burden

Fast data quality assurance process saves time with streamlined calibration.

Simplified protocol selection on the gantry touchscreen and a new user interface to enable an easy PET/CT process from start to finish.

AutoIN gives technologists ability to landmark and position the patient table from the console room, improving imaging workflow and may reduce technologist exposure to radiation.<sup>5</sup>

#### Reduce noise

System complies with IEC60601-1 where noise is less than 80dB.<sup>6</sup>

Gantry bore 68.1 dBA (CT rotor max rotation)

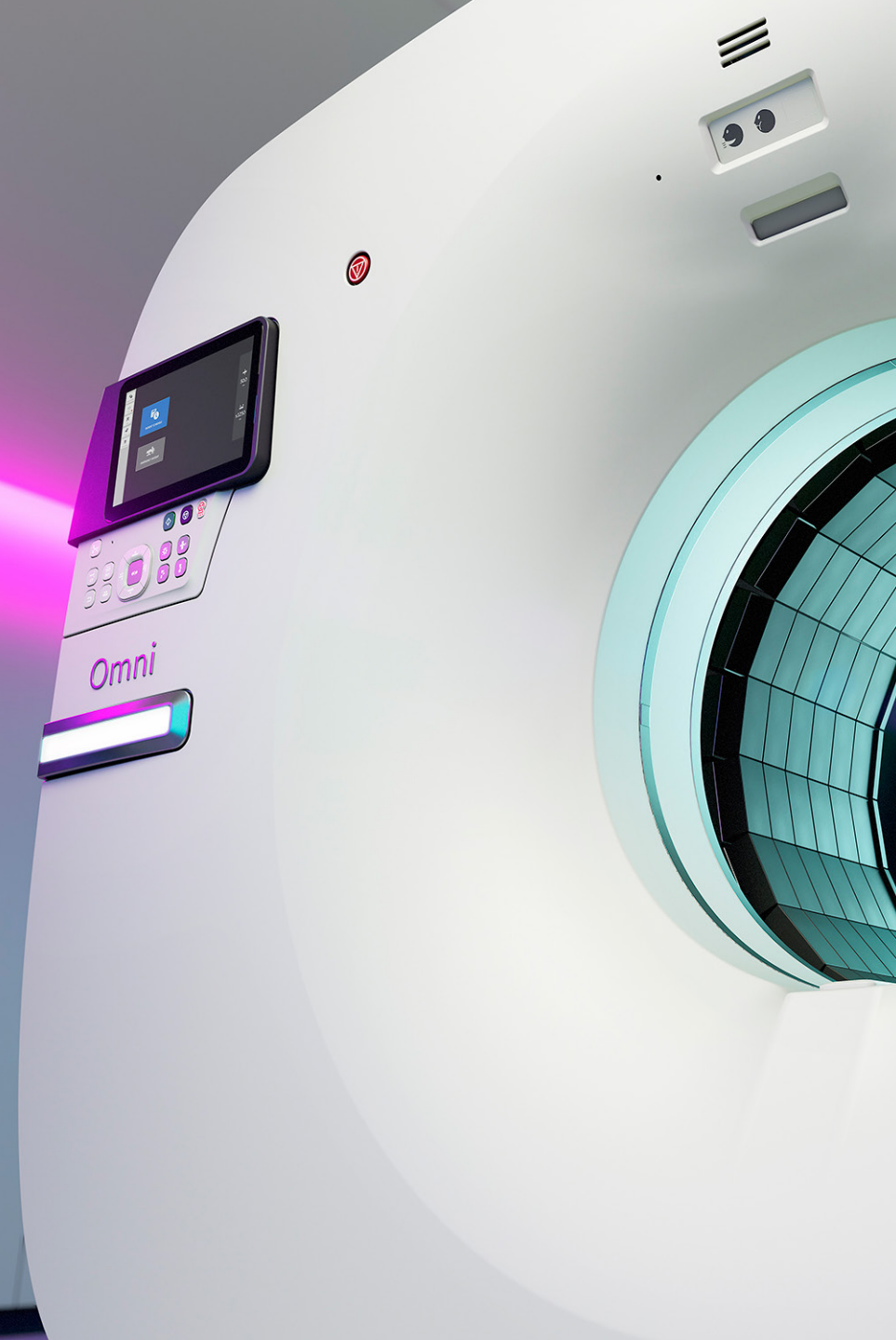
Near chiller 67.6 dBA

Near PARC 67 dBA

<sup>4</sup> Based on clinical practice at University Hospital Zurich, using 5-Ring PET/CT with MotionFree and RPM. These results are for illustrative purposes only and represent specific customer experiences; actual results could vary depending on clinical practice and circumstances.

<sup>5</sup> AutoIN may minimize the radiation dose to technologist and time spent to position the patient from the scanning room.

<sup>6</sup> Following IEC60601 section 9.6.2.1 80 dBA for a cumulative exposure of 24 h over a 24 h period (dBA).



## Product utilization (Cont.)

### Guidance for product utilization

Instructions are provided for use of the equipment to minimize the environmental impact during installation, use, and operation.

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### Reduce energy consumption during use

Standby power mode, results in up to 50% reduction in energy when idle.<sup>7</sup>

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### Power consumption

Off mode: Energy Savings Mode: 5.2 kW  
Standby (no scan): Idle: 8.5 kW  
Scan mode: CT Scan Max: 100 kVA peak, 20 kVA RMS  
CT Scan Typical: 13 kW peak, 9 kW RMS  
PET Scan Typical: 9 kW  
CT PET Hybrid Scan Typical: 18 kW

<sup>7</sup> Compared to the same system not using standby power mode.





## End of product life

We are increasingly putting our retired products' materials back into the supply chain to maximize efficient use and minimize unnecessary waste. This circularity model enables our imaging products to extend their clinical impact through longer lifespans while reducing the environmental footprint. Additionally, we offer our customers partnered support for upgrades and services throughout a product's lifespan to maintain optimal performance and help drive better patient outcomes.

Our refurbishment programs involve an extensive inspection and testing process, designed to bring equipment back to its original certified manufacturing specifications. If the system is not suitable for refurbishment, eligible parts are harvested for reuse after quality and performance testing, while the rest are returned to dedicated recycling facilities.

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### Guidance for end of lifecycle

Equipment instructions are provided to minimize the environmental impact for disposal or recycling.

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### Extending the product lifespan

Hardware and software options are provided as a solution to extend the product lifespan.

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### Parts harvesting and refurbishment options are provided to reduce waste and environmental impacts while extending imaging access to less advantaged regions.

PET/CT system parts are eligible for assessment through the refurbishment program, in which they are assessed for refurbishment, harvesting, or recycling at the appropriate time in the lifespan.<sup>8</sup>

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### Waste reduction

This system is in accordance with Waste Electrical and Electronic Equipment (WEEE) regulations.

<sup>8</sup> Products within MR, CT, nuclear medicine, and PET/CT are eligible for refurbishment, although whether a system is actually refurbished versus harvested for parts or otherwise recycled or reused is dependent on the state of the system when GE Healthcare takes possession of it. Data on file.





## Digitizing healthcare through transformative innovations for a resilient tomorrow

We are committed to investing in digital capabilities that help accelerate clinical decision making, optimize imaging operations, and drive efficiencies in exam workflows, all of which can improve patient outcomes. Enabling digital transformation will further enhance our predictive and maintenance service operations for the life of your products.

**We are also dedicated to driving a more resilient and sustainable future in healthcare.** Many factors, including the pandemic, climate-related weather disasters, and supply-chain issues amplified this need. Managing operations through these challenges requires resilience and perseverance.

### Advancing clinical outcomes

Advanced applications and cutting-edge AI tools provide personalized data to drive actionable insights, helping healthcare professionals make fast, accurate clinical decisions for care pathways.

#### Gain actionable clinical insights quicker for earlier diagnosis

Omni Digital Detector enables highest system sensitivity per cm on the market<sup>9</sup> for ultra-fast scan times.

AutoIN improves imaging workflow by allowing patient table landmarking and positioning from the console room.

Auto Positioning enables one-click patient setup.

Simplified protocol selection on the gantry touchscreen.

MotionFree digital respiratory motion correction provides up to a 30% improvement in quantitation accuracy (SUVmean) compared to non-motion corrected data.<sup>10</sup>

Lower field-of-view overlap (25%) provides optimal number of bed scans resulting in ultra-fast scanning.

<sup>9</sup> Data on file.

<sup>10</sup> As demonstrated in phantom testing using a typical and fast respiratory model and OSEM reconstruction. Quantitative accuracy improvements are based on SUVmean.



## Advancing clinical outcomes (Cont.)

### Help improve patient outcomes with improved image quality

Precision DL<sup>11</sup> improves contrast recovery and contrast-to-noise ratio comparable to that from a premium digital PET/CT with Time-of-Flight (ToF) reconstruction.<sup>12</sup>

Omni Legend 32 cm with Precision DL has comparable small lesion detectability to Omni Legend 32 cm with Non-ToF reconstruction and increases small, low-contrast lesion detectability by 42% on average as compared to a premium digital PET/CT with ToF at matched scan time and injected dose.<sup>13</sup>

MotionFree provides up to a 67% improvement in lesion volume measurements.<sup>14</sup>

### Drive advancements with precision health

Optimized for the diagnostics portion of theranostics imaging for precise, personalized care.

<sup>11</sup> Omni Legend and Precision DL are CE marked. Omni Legend is 510k-cleared by the U.S. FDA. Precision DL is 510k-pending with the U.S. FDA. Not available for sale in the United States.

<sup>12</sup> Contrast recovery and contrast-to-noise demonstrated using clinical data with inserted lesions of known size, location, and contrast. Using data from Discovery MI, CR and CNR were measured using H-PDL and were within 5% of measurements using QCFX.

<sup>13</sup> Detectability using clinical data with an inserted 8 mm diameter liver lesion of known location and 2:1 contrast using a CHO model observer, comparing SNR from Omni Legend 32 cm with QCHD and Precision DL to SNR from Discovery MI 25 cm with QCFX.

<sup>14</sup> Compared to non-processed (STATIC, no motion -correction) data. As demonstrated in phantom testing using a typical and fast respiratory model, 18 mm Ge-68 spheres, and OSEM reconstruction.





## Optimizing imaging operations

Our AI-based and advanced digital solutions are designed to increase efficiencies across the radiology spectrum without increasing the administrative and training burden on radiologists and technologists.

### Increase productivity and consistency

Digital predictive capabilities are included for the CT sub-system.

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### Reduce downtime

OnWatch™ enables predictive service to digitally track key system metrics and detect any anomalies. It sends proactive alerts to a remote engineer, who either makes the repair online or schedules a service call.

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### Cybersecurity

GE Healthcare's Design Engineering Privacy and Security (DEPS) process follows GDPR, HIPAA, NIST 800-53, NIST 800-30, ISO 27001, and NIST CSF requirements.



## Enabling intelligent exam workflows

Intelligent automation features help to drive consistency, enable fast, easy exams, and improve workflow with fewer resources, all while achieving similar or improved outcomes.

### Reduce setup time

Fast data quality assurance for streamlined calibration.

Auto Positioning creates a hands-free patient positioning experience.

AutoIn provides ability to landmark and position the patient table from the console room.

### Reduce exam time

Highest PET/CT system sensitivity per cm in the market<sup>15</sup> enable fast scan times.

Ultra-high sensitivity combined with large FOV can enable ultra-fast routine whole-body imaging.

### Ease of use

Simplified protocol selection on the gantry touchscreen with a new UI to enable easy PET/CT process.

### Cleanability

Our equipment is designed to be cleaned and disinfected easily. We continue to test and approve new cleaning and disinfecting agents. Visit [Cleaning.GEHealthcare.com](https://www.gehealthcare.com/cleaning) for updates.

<sup>15</sup> Data on file.





**Building a healthy world to help enable better patient outcomes.**

GE Healthcare is a member of COCIR, the European Trade Association representing the medical imaging, radiotherapy, health ICT, and electromedical industries.<sup>16</sup>

<sup>16</sup><https://www.cocir.org/about-cocir/members.html>

*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.*

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