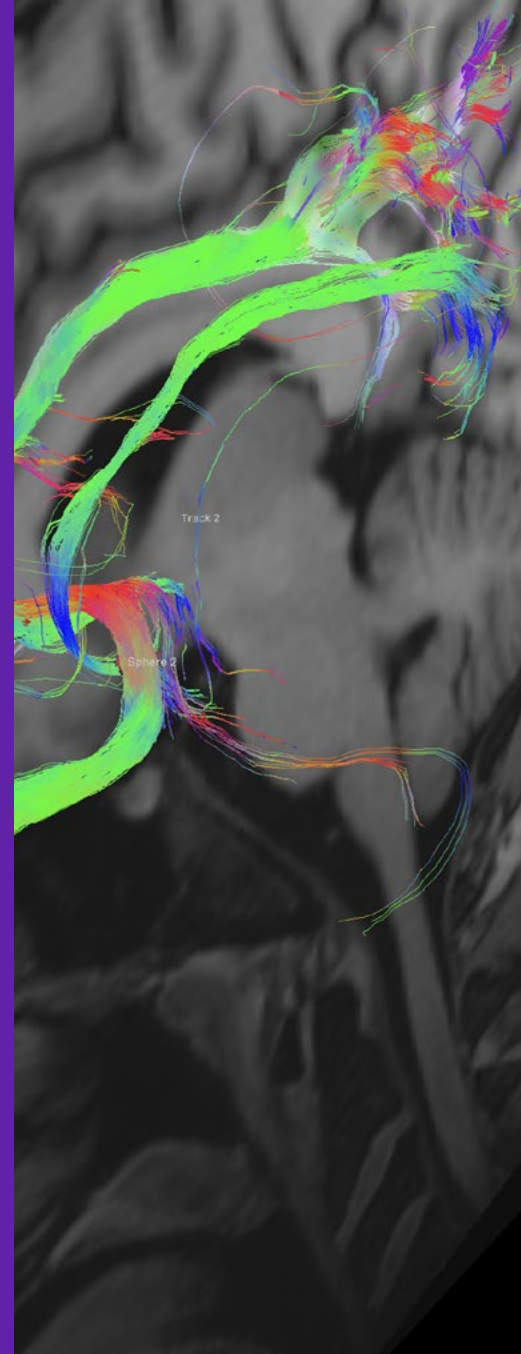
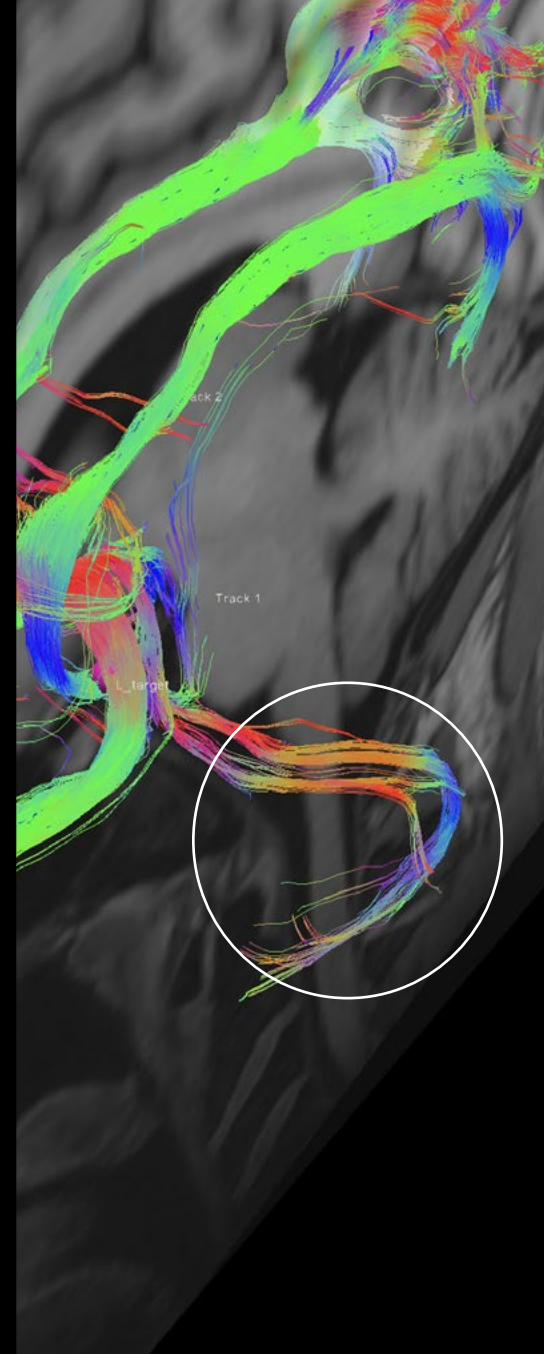


Get more with Effortless Imaging



Traditional MR¹



AIR™ Recon DL

Your day is demanding. Imaging doesn't have to be.

Deep learning can help you meet imaging challenges. Effortlessly.

You know the importance of precision imaging to clinical outcomes, but staffing challenges, rework, and inefficient workflows can get in the way. What if you could achieve exceptional image quality in less time without additional steps?

Effortless Imaging isn't an illusion. It's possible today.

As a global leader in deep-learning-enabled image acquisition, reconstruction, and processing software, we're delivering exceptional image quality, across multiple imaging modalities, with the Effortless Recon DL software collection.

Get more with Effortless Recon DL.

Effortless Recon DL software collection:

- AIR™ Recon DL
- Sonic DL™*
- TrueFidelity™
- Helix™
- Precision DL for Omni Legend

[→ Learn more](#)

EFFORTLESS RECON **DL**

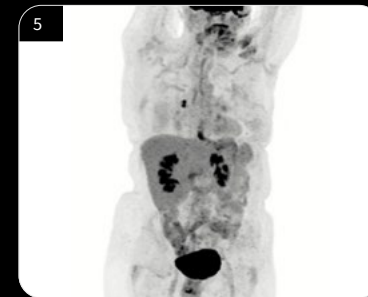
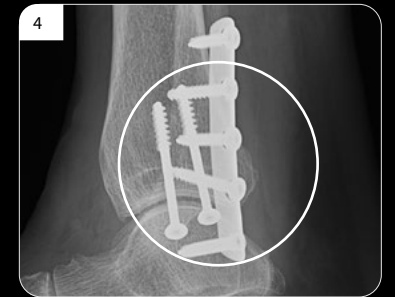
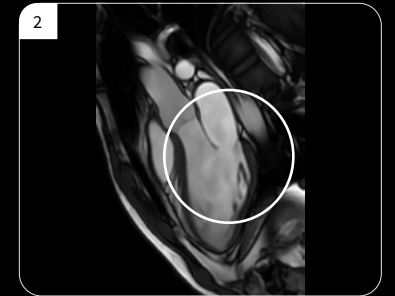
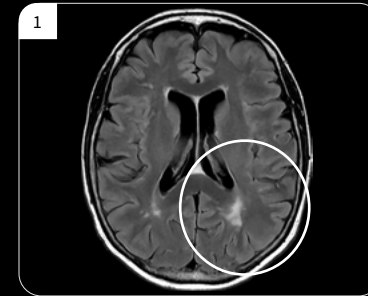
*Not yet CE marked. Not available for sale in all regions.

Deep-learning image acquisition, reconstruction, and processing delivers exceptional clarity. Seeing is believing.

Effortless quality. Effortless Recon DL.

Blurry images can hinder your ability to make interpretations with confidence and speed. By seeking to enhance image quality in areas such as contrast, signal-to-noise ratio, sharpness, edge delineation, or minimizing noise and artifacts, Effortless Recon DL is designed to deliver exceptionally clear images for improved clinical insights and decision making.

[→ Learn more](#)



EFFORTLESS RECON DL

Magnetic Resonance
1. AIR™ Recon DL
2. Sonic DL™**
Computed Tomography
3. TrueFidelity™
X-ray
4. Helix™
PET/CT
5. Precision DL



Achieve precise alignment and streamlined workflows. Without lifting a finger.

Effortless efficiency. Effortless Recon DL.

Lengthy scan times, poor image quality, and rescans consume precious time and energy. Effortless Recon DL software offers exceptional quality and, in some applications, accelerated speeds for impressive departmental and workload efficiencies. Available as an upgrade to many GE HealthCare scanners, it's simple to learn, use, and adopt.

[→ Learn more](#)

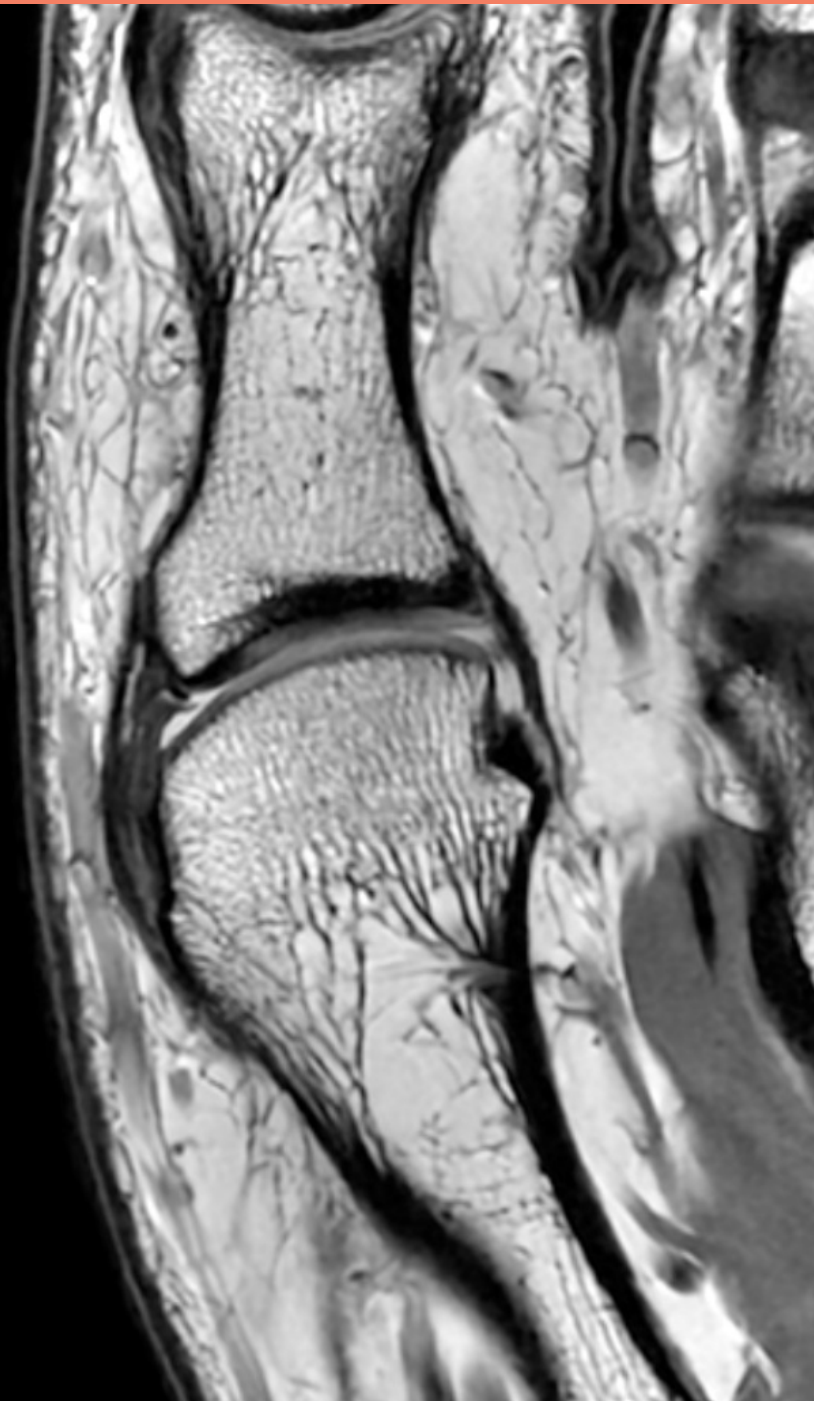


The clarity, precision,
and confidence to decide.
All gain. No pain.

Effortless outcomes. Effortless Recon DL.

Remove the guesswork and rework with consistently sharp, detailed images even in challenging exam situations. Effortless Recon DL software helps to enhance your patient experience, regardless of size or age, while empowering faster, confident diagnoses that can lead to better outcomes.

[→ Learn more](#)



AIR™ Recon DL

“The image quality. The scan times, again, probably the biggest revolution we’ve seen in the MRI field in a long time and I’ve been doing this a long time.”²

– Tom Schrack, BS, ARMRT, CS
Manager of MR Education and Technical Development
Fairfield Radiological Consultants, USA

Up to

60%

improvement of sharpness in the images³

AIR™ Recon DL

A new revolution in imaging.

Using deep-learning image reconstruction, AIR™ Recon DL makes full use of the raw data for improved image quality across all anatomies. The results are a win for patients and service providers, alike.

→ [Learn more](#)



Level up your MRI image quality.

This pioneering, DL-reconstruction algorithm delivers sharper, clearer, accurate MR images without increasing scan time. It's available for all anatomies and all GE HealthCare MR systems.

How it works:

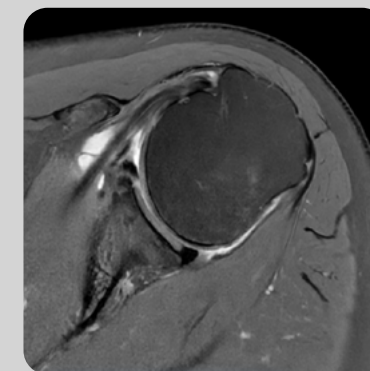
We trained our convolutional neural network to reconstruct images that:

- Eliminates image noise and ringing by leveraging raw image data.
- Enables shorter scan times while preserving signal to noise ratio and image sharpness.
- Increases productivity by enabling shorter scan times.



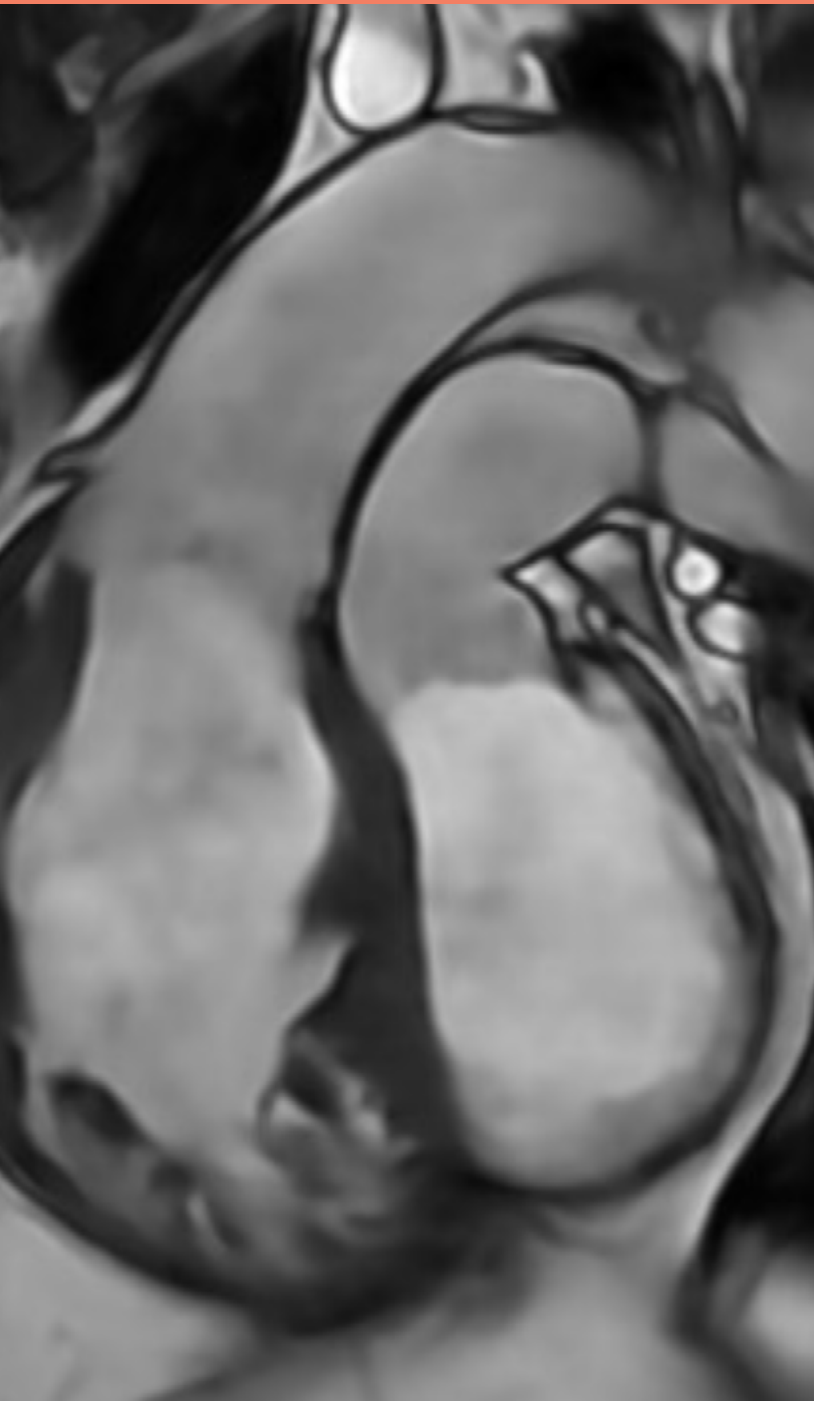
Traditional MR reconstruction¹

Axial PD FatSat
0.4 x 0.6 x 3.0 mm
2:58 min / 20 Slices



AIR™ Recon DL
Axial PD FatSat
0.3 x 0.5 x 3.0 mm
2:11 min / 20 Slices

¹As compared to traditional image reconstruction.



Sonic DL™*

“Sonic DL acquires images in a single heartbeat, which is of special importance in patients who really cannot hold their breath, have advanced heart failure, or for patients with arrhythmia.”²

– Dr. Matthias G. Friedric
Professor, Medicine and Diagnostic Radiology
McGill University

Enables up to

83%

scan time reduction while maintaining
diagnostic value**

*Not yet CE marked. Not available for sale in all regions.
**Versus full sampled CINE acquisition.

Sonic DL™

Life-speed imaging.

In MR, long scan times means imaging is compromised by the body's movement. Until now. Sonic DL™ equips your scanner with the ability to match the speed of the human body. And shifts the paradigm of acceleration in MR imaging.

[→ Learn more](#)

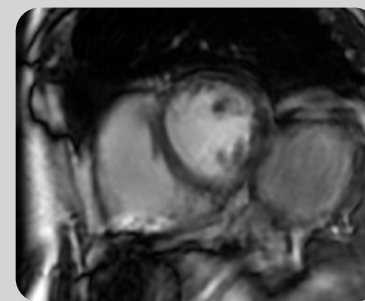


CT-like swiftness. MR-like quality.

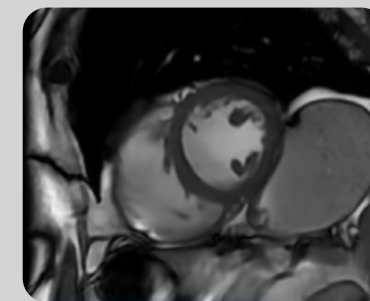
Acceleration with Sonic DL™* cuts scan times from minutes to seconds, enabling image acquisitions that were not previously possible.

The benefits are notable:

- Capture rapidly moving anatomies like heart valves easily and accurately with up to 12x acceleration.
- Accurately scan patients who could not effectively be scanned before.
- Achieve single-heartbeat and free-breathing scans effortlessly.
- Enables significantly shorter scan times while preserving image quality.
- Increase patient comfort.

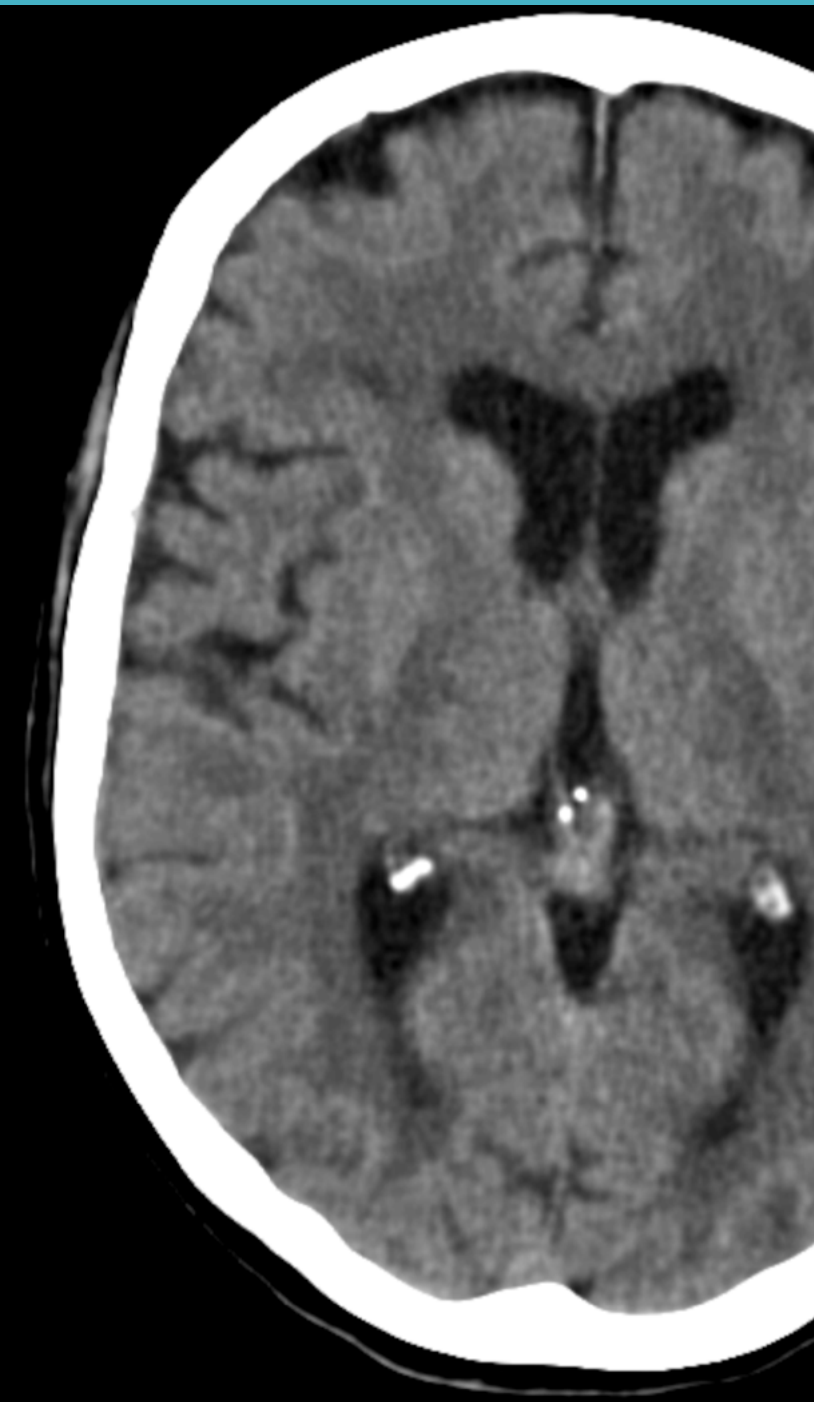


Traditional MR acceleration¹
Short Axis FIESTA Cine
2.1 x 2.1 x 8 mm
1:42 min / whole heart coverage



Sonic DL™
Short Axis FIESTA Cine
1.8 x 1.6 x 8 mm
59 sec / whole heart coverage

*Not yet CE marked. Not available for sale in all regions.
¹As compared to traditional image reconstruction.



TrueFidelity™

“This is what a head CT image should look like and never did, even in the high dose era. Less noise, fewer artifacts and a pleasure to interpret.”²

– Lawrence N. Tanenbaum, MD, FACR
RadNet

TrueFidelity noise texture is preferred by

91%

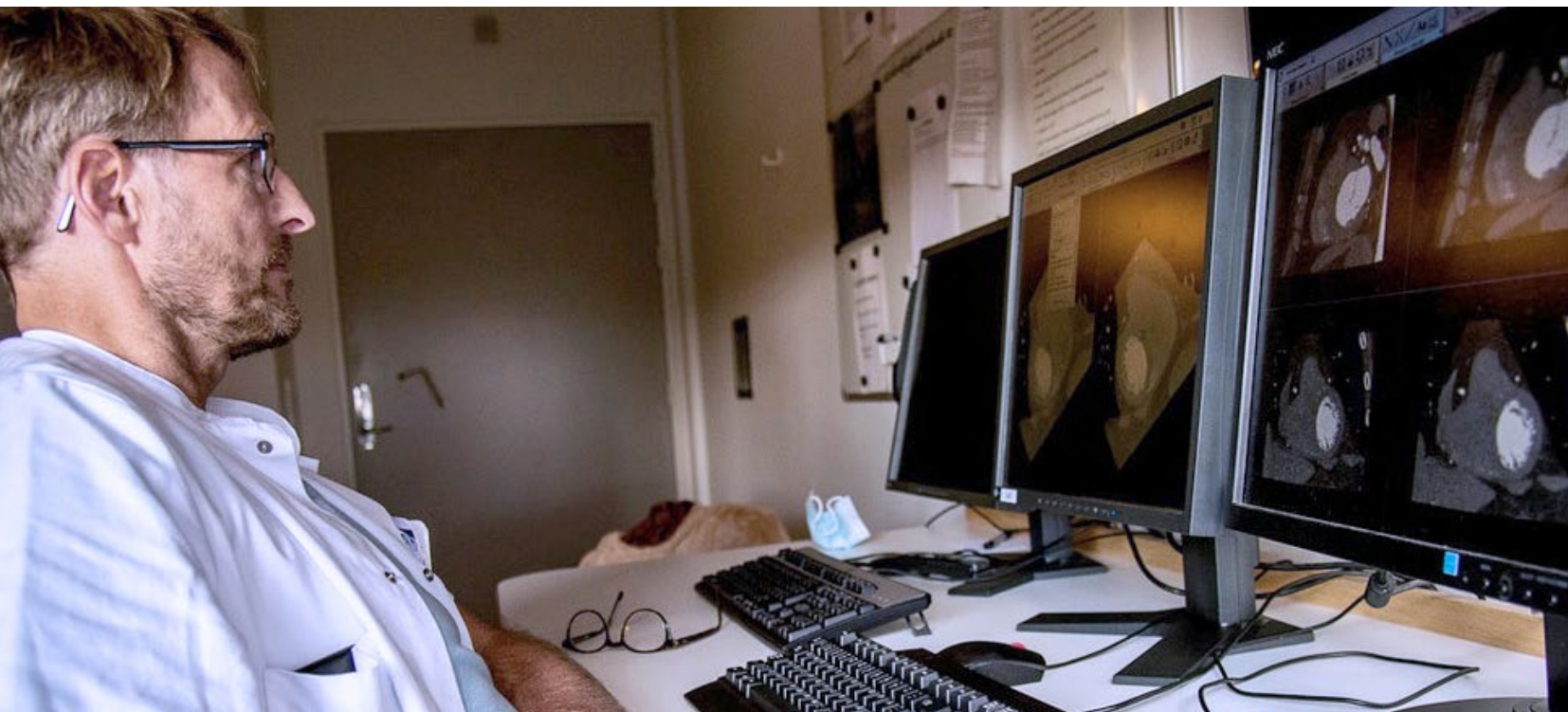
of readers⁴

TrueFidelity™

How the best see better.

TrueFidelity™ CT images are more than a radical, next-generation improvement. They elevate the vision of what you and deep-learning image reconstruction can achieve.

[→ Learn more](#)



Deep learning makes a visible difference.

Natively running on the Recon Server with highly-trained deep-learning image reconstruction, TrueFidelity provides images with texture similar to those of filtered back projection with excellent noise reduction and clarity.

Confidence. Not compromise.

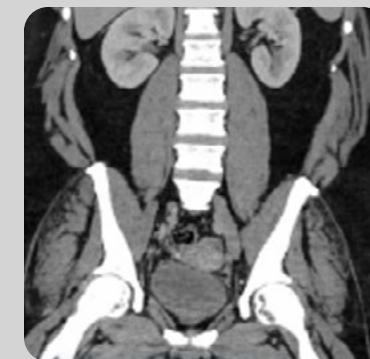
Contrast visualization is maintained; noise and artifacts are minimized; edges are maintained—just enough—so there's remarkable clarity and none of the compromise that comes with unfamiliar noise texture.⁵

The result is an information-rich interpretation experience that easily gives you the confidence you require—even as it has the potential to help you improve scan read times and fight radiologist fatigue.



DL

Traditional CT reconstruction¹
Patient with a BMI of 62
0.625 mm FBP



EFFORTLESS RECON DL

TrueFidelity
Patient with a BMI of 62
0.625 mm TrueFidelity

¹As compared to traditional image reconstruction.



Helix™

“Particularly in children in the ICU, who are sensitive to ionizing radiation... we were able to reduce the exposure required to achieve a diagnostic quality image... We were able to see through the mediastinum, to still see the bony details of the spine, which indicated that we had sufficient penetration but yet not burn out the details of the lung parenchyma and pulmonary vascular markings, and that really is an indication of a high-quality image.”²

– Dr. Nghia (Jack) N. Vo, MD
Diagnostician-in-chief, Children's Wisconsin
Chief of Pediatric Radiology, Medical College of Wisconsin

Up to

40%

Increase in detectability of fine structures⁶

Helix™ Advanced Image Processing

A bright future for X-ray.

Variation in exposure technique and X-ray image quality impacts outcomes. Take the guesswork and rework out of X-ray imaging so you can focus on what matters most—the patient.

[→ Learn more](#)



Make the first image count.

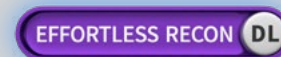
Helix™ Advanced Image Processing opens the door to new, amazing possibilities. Achieve sharp detail and consistent performance, despite variations in exposure technique and challenging exam conditions. It's the diagnostic clarity you need from the first X-ray.

Don't miss a thing.

Advanced image processing algorithms harness the full resolution and exceptional dose efficiency of FlashPad™ HD detectors to deliver outstanding clarity and extraordinary anatomical details.



Traditional X-ray reconstruction¹



Helix™ and FlashPad™ HD

¹As compared to traditional image reconstruction.



Precision DL Available on Omni Legend only

“Sensitivity and image quality are everything in PET/CT. Omni Legend delivers on both—meeting all our image quality criteria for oncology and providing impressive sensitivity to image high count tracers for cardiac and neuro imaging, which helps better inform patient diagnoses and monitoring.”²

– John Kennedy, Ph.D.,
Chief Physicist, Nuclear Medicine Department
Rambam Health Care Campus

42%

increase in small low-contrast lesion
detectability on average⁷

Precision DL

Enhance your imaging with deep learning.

Available only on Omni Legend, our innovative deep-learning software, Precision DL, provides high-sensitivity, high-resolution images with increased low-contrast lesion detectability.⁷

→ Learn more



Exceptional, consistent image quality—all from software.

Harnessing the power of deep-learning image processing, Precision DL provides improved contrast-to-noise ratio and contrast recovery,⁸ at a similar level to time-of-flight reconstruction. Precision DL also provides great customization options—with low, medium, or high strength so you can tailor the result to your clinical preference.



EFFORTLESS RECON **DL**

Precision DL
OMNI
Number of beds: 4
Total scan time: 8 minutes
Uptake time: 90 minutes



¹As compared to traditional image reconstruction.

²The results achieved by this facility may not be applicable to all institutions, and individual results may vary. This is provided for informational purposes only and its content does not constitute a representation or guarantee from GE HealthCare.

³By leveraging raw data and integrating AIR™ Recon DL within the image reconstruction / •ARDL leverages raw data and is integrated in the image reconstruction. This delivers improved SNR and sharpen images by up to 60%.

⁴As demonstrated in a clinical evaluation consisting of 60 cases and 9 physicians, where each case was reconstructed with both TrueFidelity and ASiR-V and evaluated by 3 of the physicians.

In 91% of the reads, TrueFidelity noise texture was rated better than ASiR-V's. This rating was based on each individual reader's preference.

⁵DLIR neural networks give an image appearance (as shown on NPS plots) similar to traditional high-dose, low-noise FBP images. Demonstrated in phantom testing comparing images reconstructed from the same raw data, with DLIR-H and ASiR-V 100%, using the standard kernel.

⁶GE whitepaper: High resolution for improved visualization (DOC2045904) For a clinically relevant exposure settings of a chest X-ray in condition 3 (120kVp, 1mAs) the detectability improvement (IQFinv) measured is +40%.

⁷Detectability 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 PDL to SNR from DMI 25 cm with QCFX, as matched scan time and injected dose.

⁸As compared to QCHD. Contrast Recovery (CR) and Contrast to Noise Ratio (CNR) demonstrated using clinical data with inserted lesions of known size, location, and contrast. Using data from Omni Legend 32 cm, CR and CNR were measured using H-PDL and QCHD, medium, or high strength to tailor the result to your clinical preference.