International version. Not for distribution or use in the U.S.
uMR 670 is not yet submitted to FDA. Not commercially available in the U.S.
Shanghai United Imaging Healthcare Co., Ltd.
Copyright © Shanghai United Imaging Healthcare Co., Ltd. All Rights Reserved.

Shanghai, China
2258 Chengbei Rd., Jiading District, Shanghai, 201807.

Email | info.global@united-imaging.com
Business Consultation | +86（21）- 67076666
After-sales Service | 4006 - 866 - 088

88000653-MPD-BRE-01

UNITED IMAGING

uAiFI inside

uMR 670

'3T Performance' from 1.5T Wide-bore System

Freedom Experience · Expand MRI

ABOUT UIH

At United Imaging, we develop and produce advanced medical products, digital healthcare solutions, and intelligent solutions that cover the entire process of imaging diagnosis and treatment. Founded in 2011 with global headquarters in Shanghai, our company has subsidiaries and R&D centers across China, the United States, and other parts of the world. With a cutting-edge digital portfolio and a mission of broader access to healthcare for all, we help drive industry progress and bold change.

To learn more, visit https://www.united-imaging.com

uAiFI inside

Wide Bore with Unique Starlight Environment

The glint of starlight helps ease patient anxiety and creates a less stressful environment, pioneering the evolution of MRI care.

uMR 670 | uAIFI inside

3T Performance from 1.5T Wide - bore System

With high performance hardware system and empowered by uAIFI Technology, uMR 670 leads the way to a new era of 1.5T wide-bore system with 3T image quality.

Unmatched Wide-bore Magnet

Remarkable homogeneity for outsdanding image quality.

Contactless Sensing of Patients' Respiratory Motions

uAIFI EasySense for enhanced patient comfort and streamlined workflow.

High Performance RF System

48+ independent receiver channels with new generation of high-density RF coils for rapid image acquisition.

Deep Learning-based Image Reconstruction

uAIFI DeepRecon for "3T-like" imaging performance.

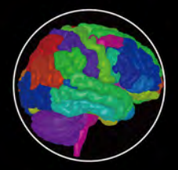
uAIFI Technology

Achieve the Impossible for Imaging

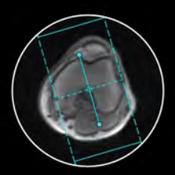
The uAIFI Technology Platform will provide the uMR 670 with significant performance improvements, more powerful imaging capabilities, better workflow, and improved patient experience.

DeepRecon*

QScan*



EasyProcess



EasyScan

EasyPlan

EasySense*

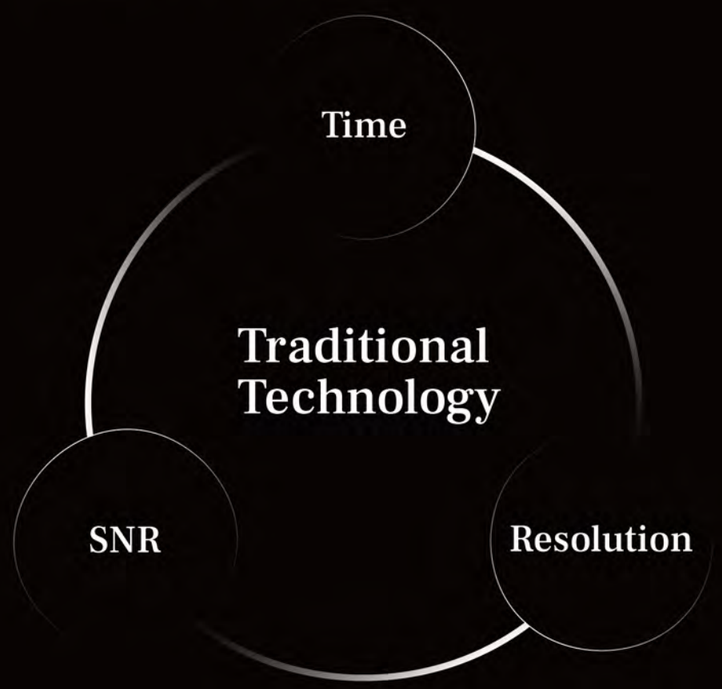
*Not CE marked yet, not commercially available in the EU.

uAiFI Technology

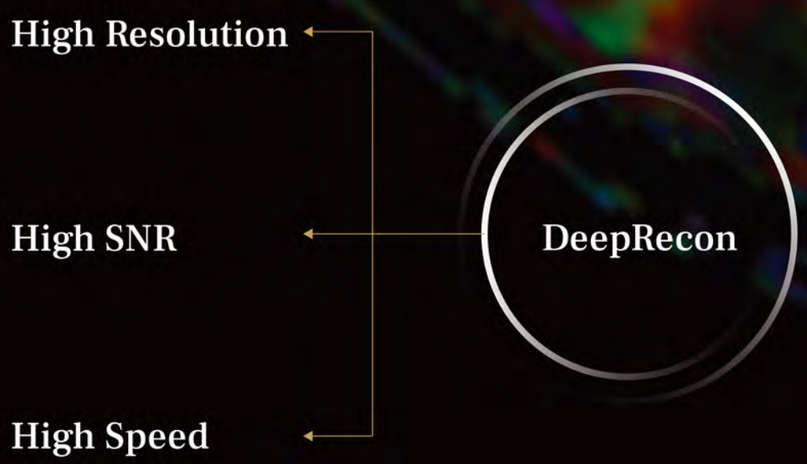
AI for Imaging

United Imaging introduces DeepRecon, a deep learning-based image reconstruction technology for intelligent image de-noising and K-space-interpolation based image super-resolution.

Limitations of Traditional Technology: Mutually Restricted

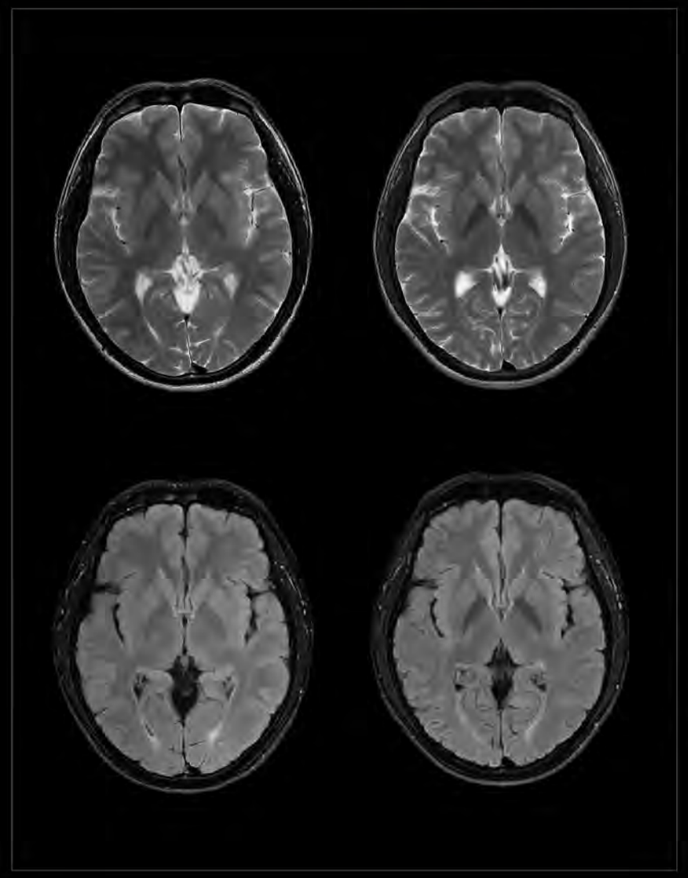


Innovation Breaks the Limitations: Optimally Balanced



uAIFI DeepRecon*

Based on deep learning-based image reconstruction algorithm, DeepRecon enables intelligent denoising for improved signal-to-noise ratio, while increasing the image sharpness simultaneously. It covers all body parts with a broad range of sequences to provide "3T-like" imaging performance.



Same Resolution and Scanning Time

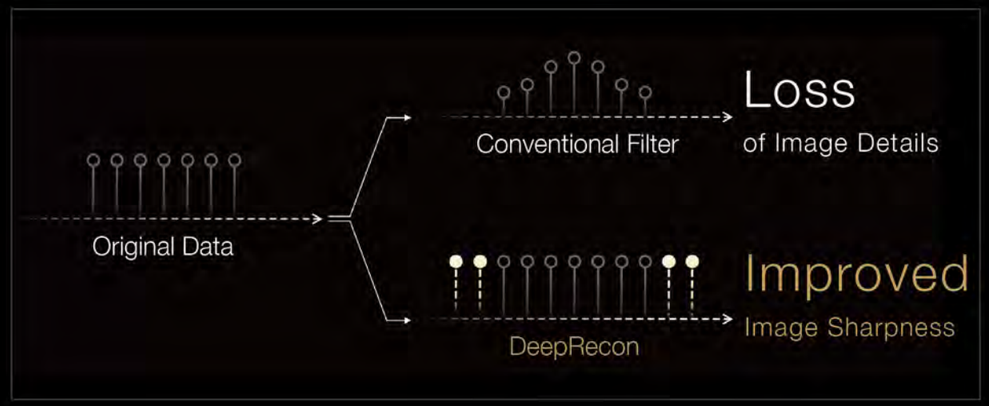
T2W FSE TRA
0.6×0.6×5 mm^3
2:20 min.

Same Resolution and Scanning Time

T2W FSE FLAIR FS TRA
0.8×0.8×5 mm^3
2:08 min.

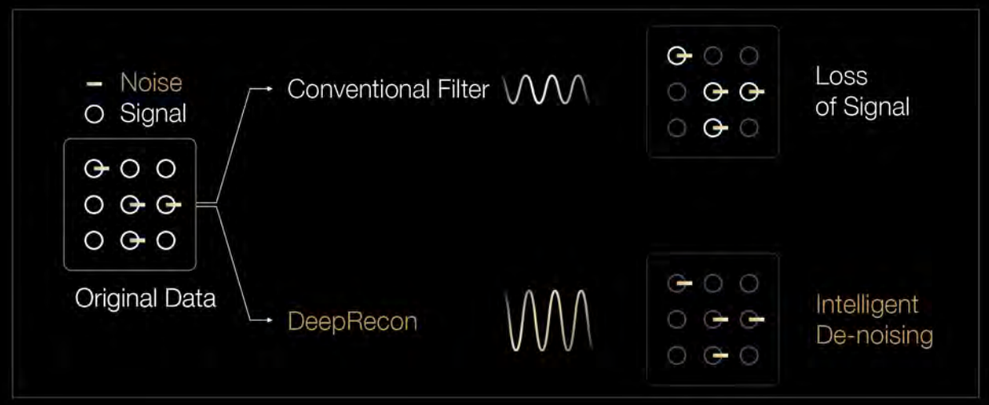
Deep Learning-based Reconstruction

Intelligent prediction of peripheral K-space data to achieve sharper image.



AI-driven Denoising

Significantly increase image signal-to-noise ratio.



*Not CE marked yet, not commercially available in the EU.

AiFI DeepRecon*

Significant improvement of image signal-to-noise ratio for enhanced diagnostic confidence.

Conventional

T2W FSE SAG

DeepRecon

T2W FSE SAG

Conventional

T2W FSE FS SAG

DeepRecon

T2W FSE FS SAG

*Not CE marked yet, not commercially available in the EU.

AiFI DeepRecon*

Enhanced image sharpness for better display of anatomical details.

Conventional

T2W FSE COR

DeepRecon

T2W FSE COR

Conventional

PDW FSE FS SAG

DeepRecon

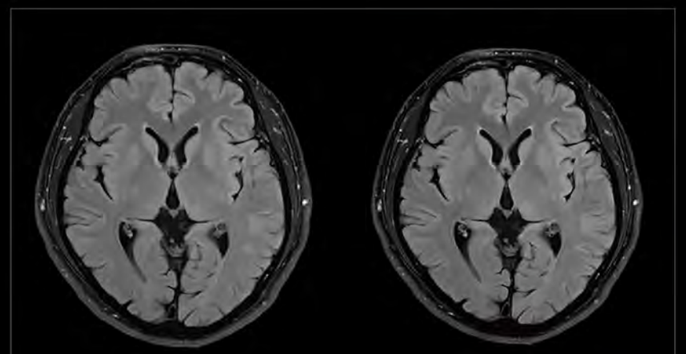
PDW FSE FS SAG

*Not CE marked yet, not commercially available in the EU.

uAIFI DeepRecon*

Same image quality with shorter scan time.

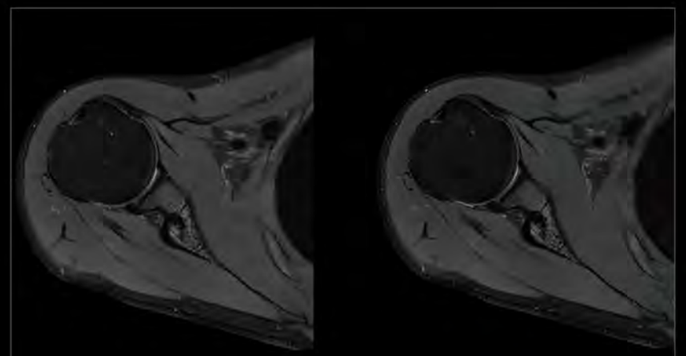
Conventional DeepRecon



T2W FLAIR FSE FS TRA
2:56 min.

T2W FLAIR FSE FS TRA
1:52 min.

Time saving
36.3%

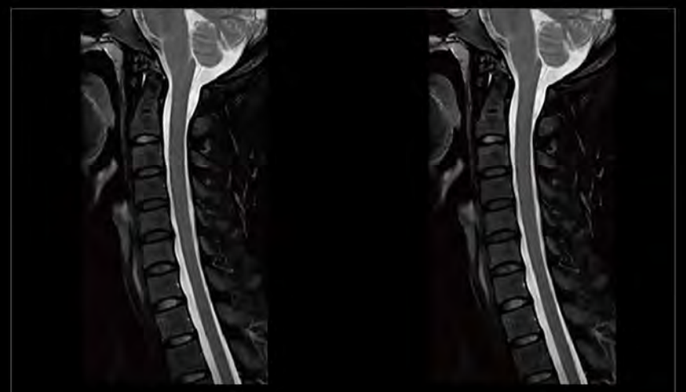


PDW FSE FS TRA
2:31min.

PDW FSE FS TRA
2:03 min.

Time saving
18.5%

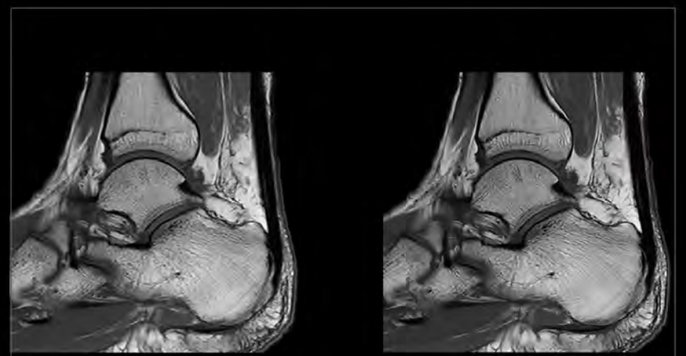
Conventional DeepRecon



T2W FSE FS SAG
3:18 min.

T2W FSE FS SAG
2:30 min.

Time saving
24.2%



T1W FSE SAG
2:48 min.

T1W FSE SAG
2:12 min.

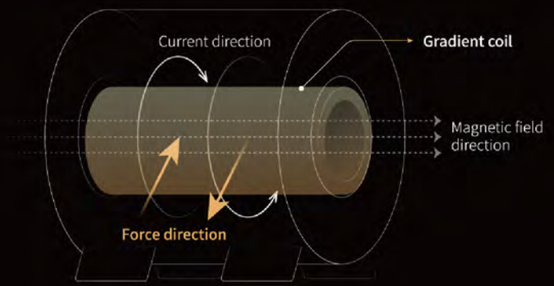
Time saving
21.4%

*Not CE marked yet, not commercially available in the EU.

AiFi QScan*

MR acoustic noise is one of the most common patient and medical staff concerns. With QScan technology, acoustic noise is significantly reduced at source and converted into smoother and more pleasant sounds for better care. QScan achieves a broad range of sequences for complete clinical examinations, including 2D/3D anatomical imaging as well as DWI, SWI, and MRS.

Acoustic Noise Reduction at Source

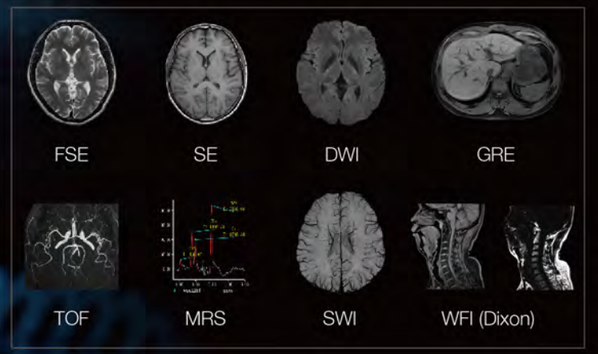


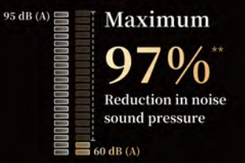
Noise source: gradient vibration

Conventional Gradient Waveform: Dramatic Switching

QScan Gradient Waveform: Optimised

A Broad Range of Sequence Coverage





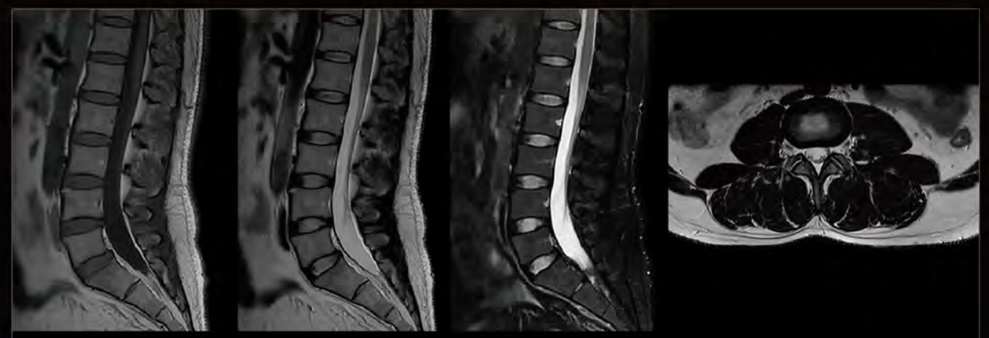
Maximum
97%**
Reduction in noise sound pressure

*Not CE marked yet, not commercially available in the EU.

** Depending on the condition of usage and examination.

Quiet Scanning without Compromise

QScan can be done with the enhancements of both DeepRecon and uCS, simultaneously improving image quality and scanning speed.

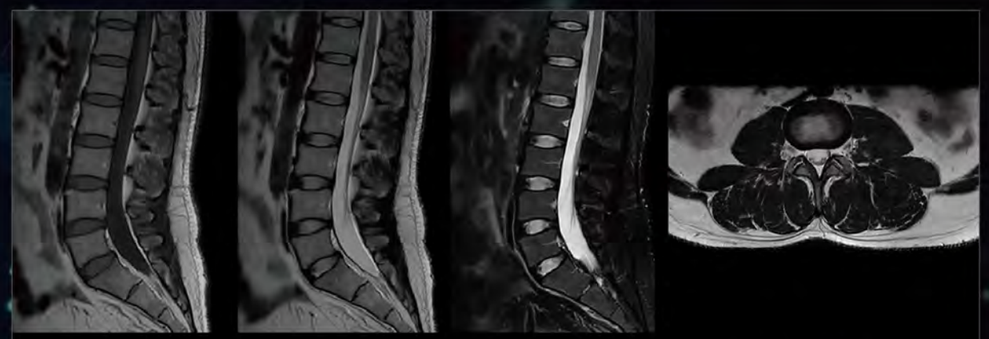


T1W FSE SAG
3:32 min.

T2W FSE SAG
3:34 min.

T2W FSE FS SAG
4:04 min.

T2W FSE TRA
1:56 min.



T1W FSE SAG
QScan
2:43 min.

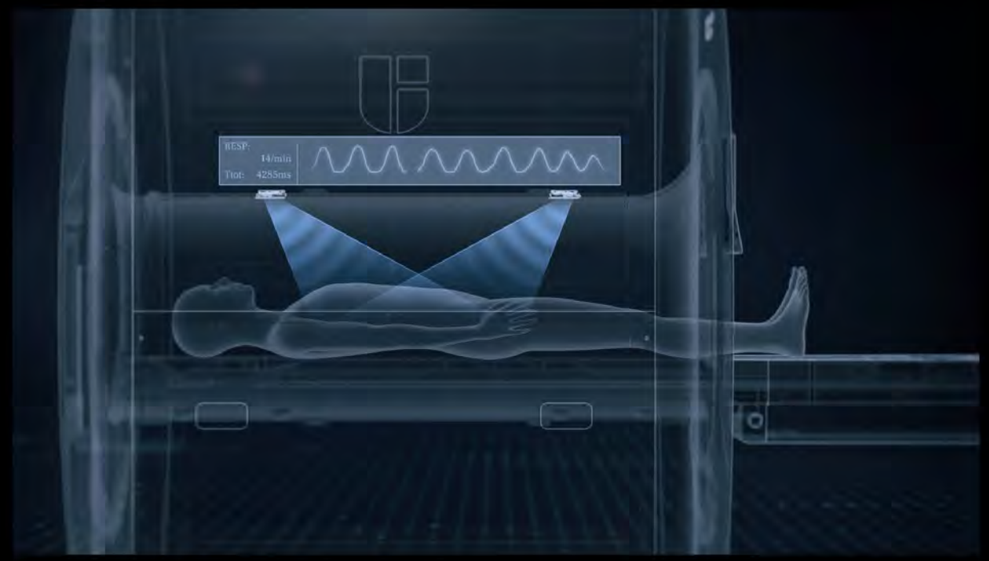
T2W FSE SAG
QScan
2:56 min.

T2W FSE FS SAG
QScan
3:09 min.

T2W FSE TRA
QScan
1:56 min.

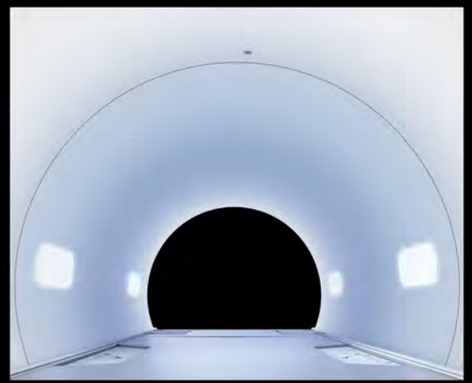
AiFI EasySense*

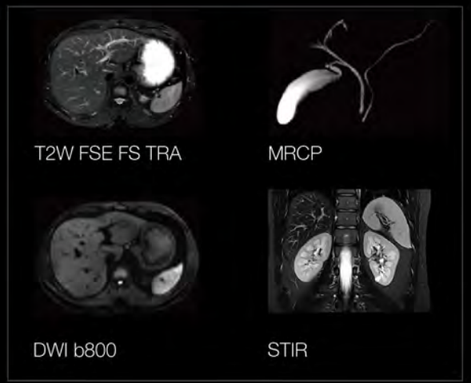
Industry's first dual-source phased-array millimeter-wave radar solution for contactless sensing of patients' respiratory motions.



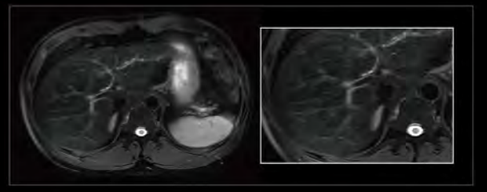
Non-contact Remote Sensing: scanning more freely
Dual Source Detector: more accurate scanning
Time Resolution: 20 ms
Motion Detection Resolution: 0.1 mm

Free Breathing Abdominal Imaging for All Sequences

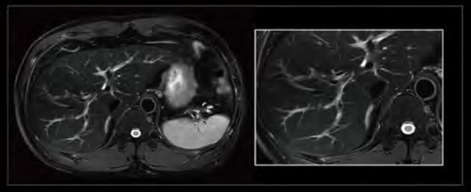




More Stable Imaging



False Triggering
With Respiratory Belt

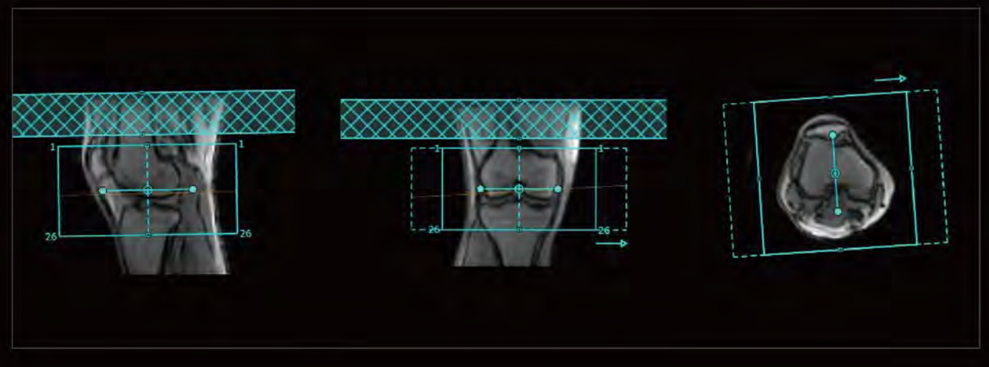


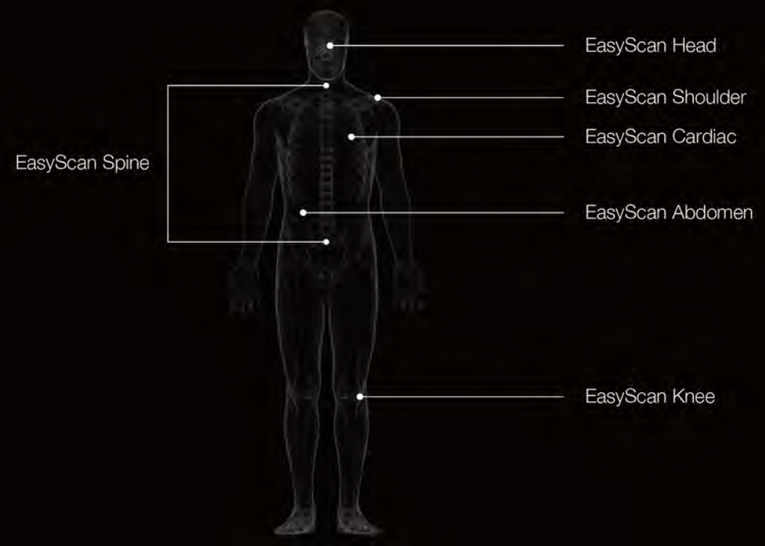
Precise Triggering
With EasySense

*Not CE marked yet, not commercially available in the EU.

uAiFi EasyScan

The full scan process is optimized and simplified, enabling automatic positioning of multiple body parts in one click. The scan efficiency, image stability and image consistency are all improved, especially in complex clinical applications such as cardiac and abdominal imaging.





Conventional Cardiac Positioning

8 breath-holds **5-10** mins **Complex** Workflow

Scout 3PL → Scout TRA → Scout 2CH → Scout 4CH → Scout SAX → Scout 4CH → Scout 2CH → Scout 3CH

EasyScan Cardiac Positioning

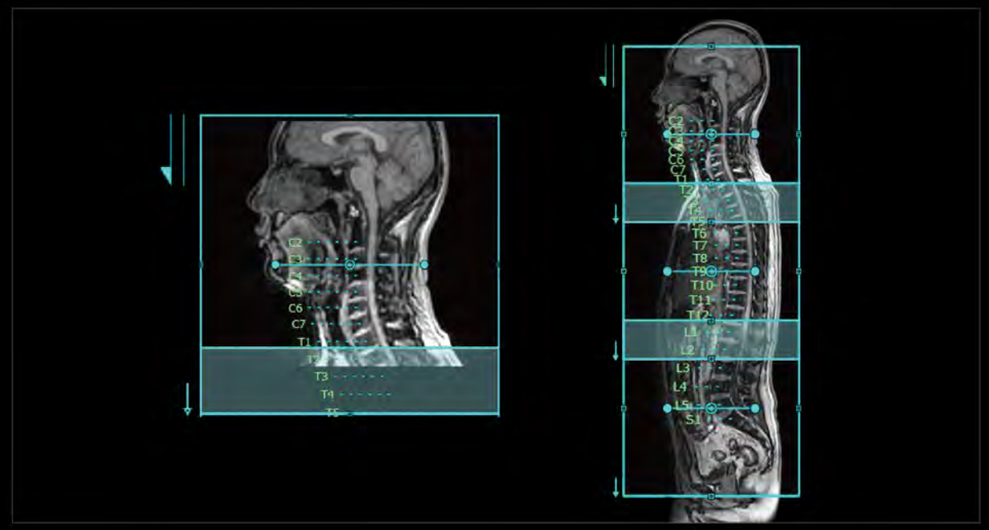
1 breath-hold **10** sec **Streamlined** Workflow

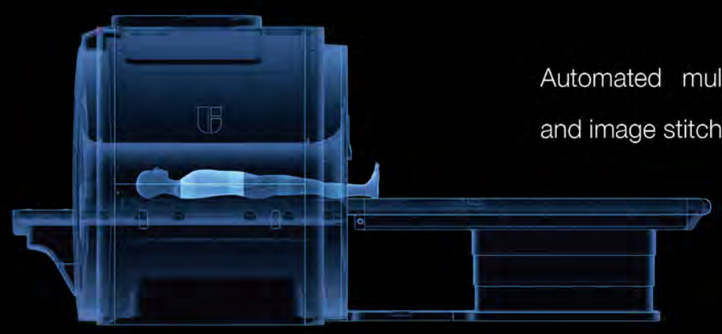
TRA COR SAG SAX 2CH 3CH 4CH

uAIFI EasyPlan

EasyPlan allows intelligent planning of multi-bed and multi-protocol scanning, including automated bed position adjustment and scan range comfirmation, which significantly simplifies the workflow of scanning.

Automated Whole Spine Labeling





Automated multi-step scan planning and image stitching with ONE click

Conventional Whole Spine Imaging

uAIFI Whole Spine Imaging

Conventional workflow is complex and requires manual planning.

EasyPlan: Automatic multi-step scan planning and image stitching with ONE-click.
DeepRecon: Deep learning-based image reconstruction technology, simultaneously improving SNR and image sharpness.

Advanced Clinical Application Solutions

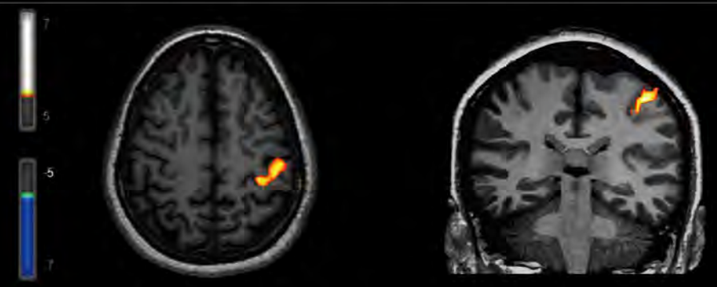
Expand the boundaries of wide-bore 1.5T MRI applications to the next level.

Advanced Neuroimaging Solutions

Open up a new chapter for precise diagnosis and scientific research of neurological diseases.

BOLD

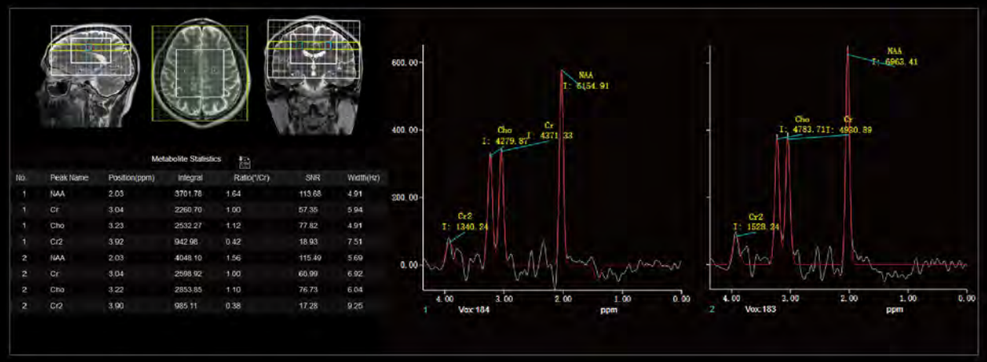
Localization of important functional brain regions for scientific research, neurosurgery and other clinical applications



Right-handed experiment, BOLD combined with T1W

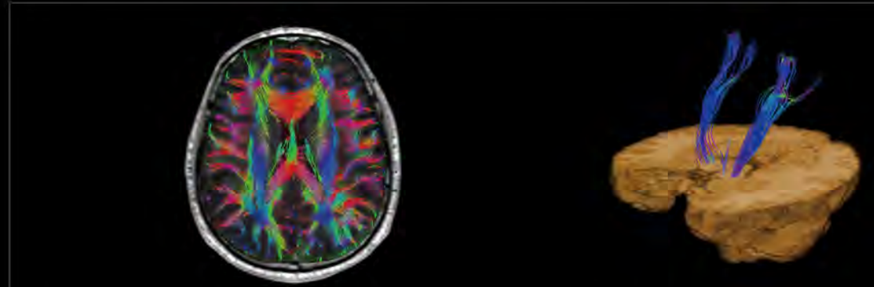
MR Spectroscopy

Obtain accurate metabolic analysis on a wide range of applications such as oncology, degenerative diseases and metabolic diseases.



DTI Advanced Post-processing and Fiber Tracking

Accurate display the relationship between the lesion and the fibers, guiding preoperative planning and post-operative evaluation.

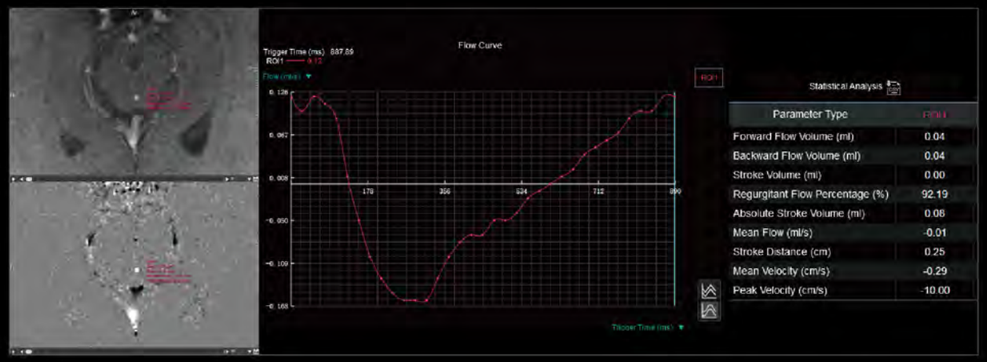


Fiber Tracking with T1W

Reconstruction of Bilateral Corticospinal Tracts

Flow Quantification

Support the measurement of CSF volume and flow rate, providing a new examination tool for diseases related to CSF production, circulation and abnormal absorption.

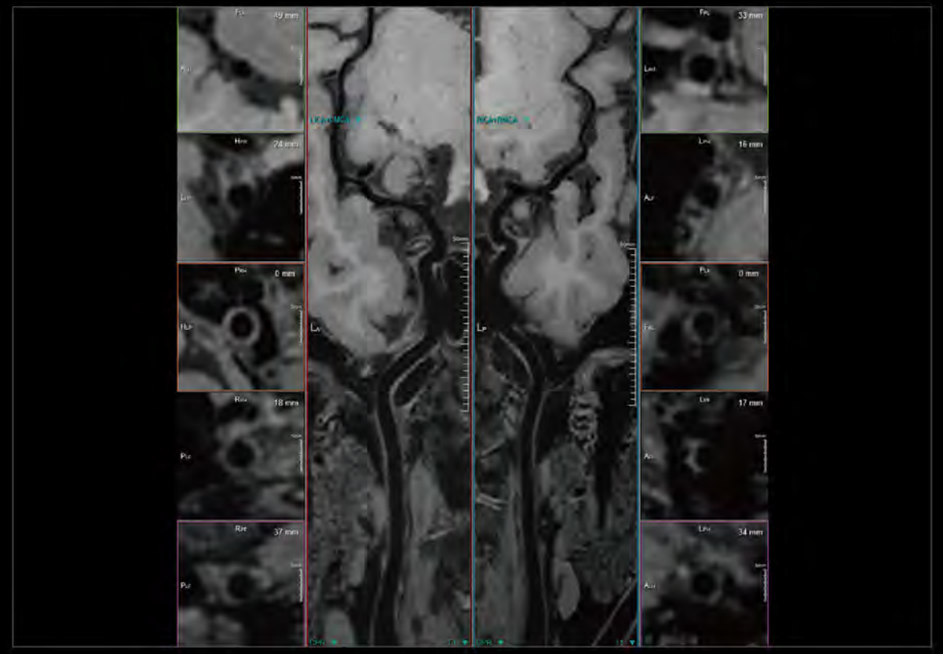


High-resolution Vessel Wall Imaging Solutions

Providing more values in the prevention, diagnosis and prognostic assessment of cerebrovascular diseases.

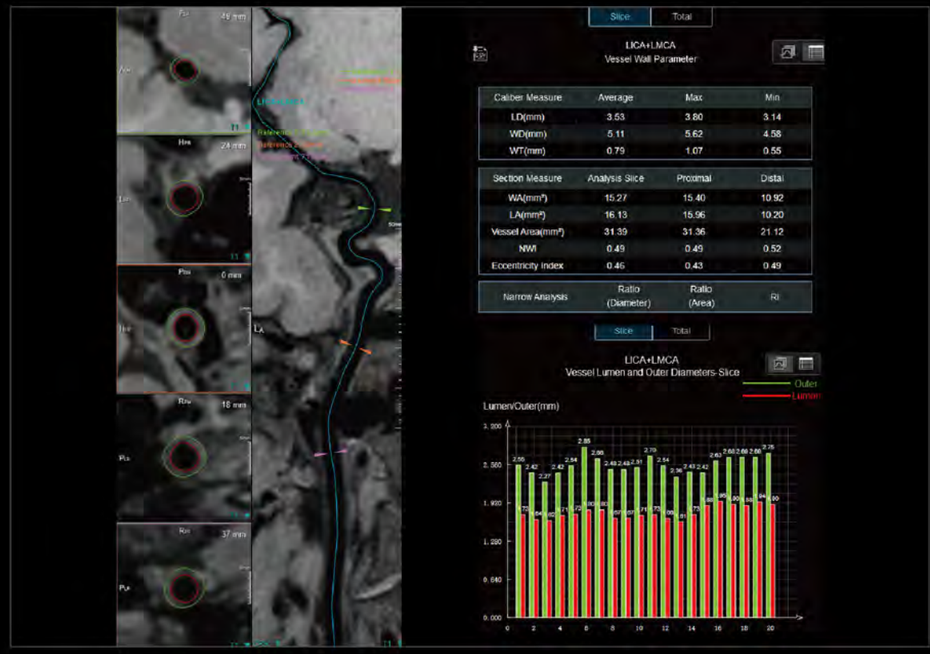
uCS

High resolution, high SNR and fast scanning speed at the same time.



T1W MATRIX 3D FS
0.7×0.7×0.7 mm^3
8:56 min.

Advanced Post-processing for Vascular Analysis



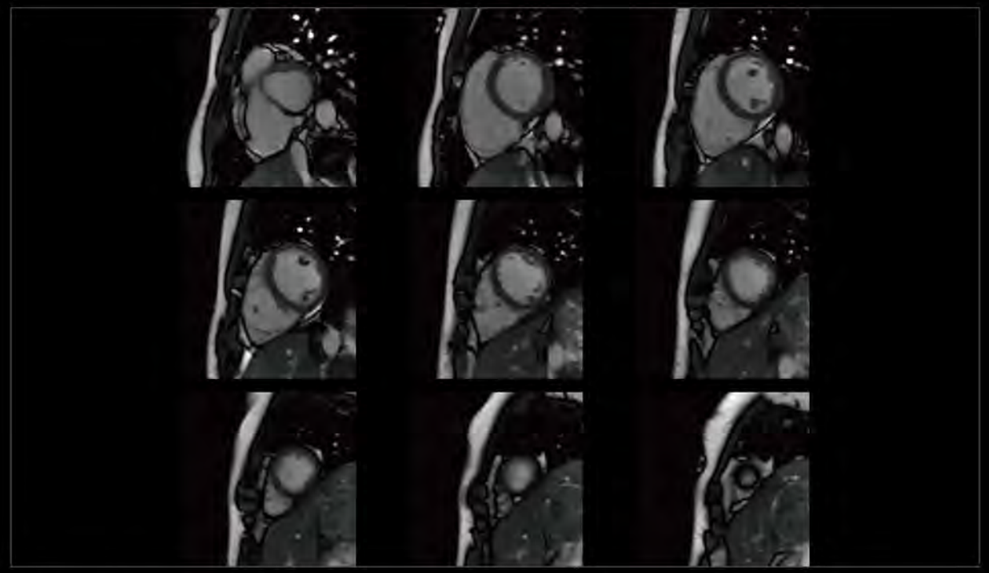
- Accurate extraction of vessel centerlines and vessel contours
- Automated detection of abnormal areas in the target vessels and obstruction analysis.
- Significant optimization of workflow

Advanced Cardiac Imaging Solutions

One-stop & full process heart applications including single breath-hold cardiac cine, cardiac function analysis and flow quantitative analysis.

uCS

uCS Single Breath-hold Cardiac Cine



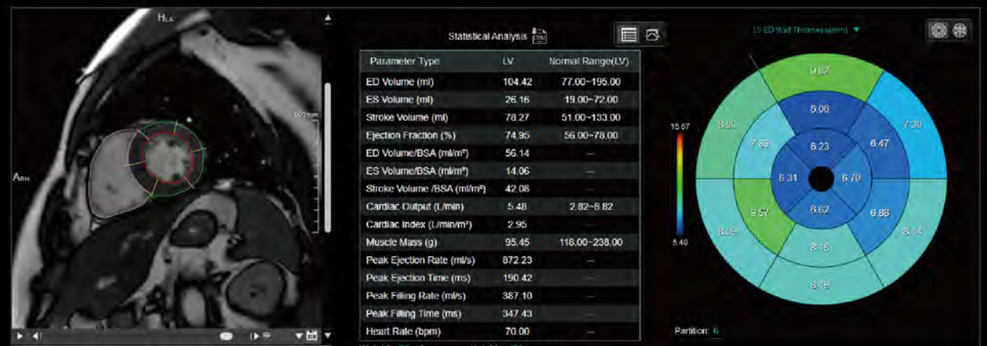
| Patients: 10 breath-holds changed to 1 breath-hold which provides more comfortable scanning

| Doctors: Adequate and accurate imaging information

| Technicians: Improving success rate, reducing the workload caused by failed patient breath-hold

| Departments: Reducing the exam time per patient and increasing patient throughput

Intelligent Cardiac Function Post-processing

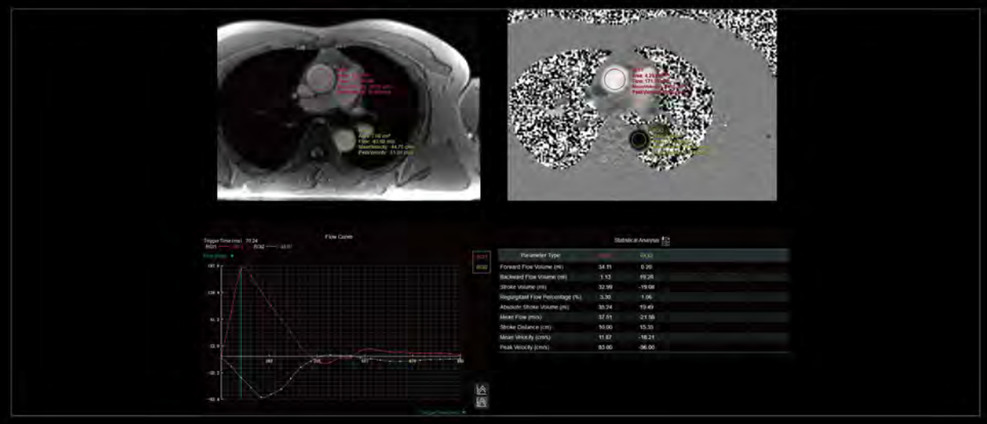


Fully automated extraction of left and right ventricular contours

Fully automated calculated cardiac function parameters

Fully automated bull's eye map for assessing myocardial thickness

Cardiac Flow Quantitative Analysis



Advanced Body Imaging Solutions

Expand the boundaries of clinical applications and scientific research topics in body diseases.

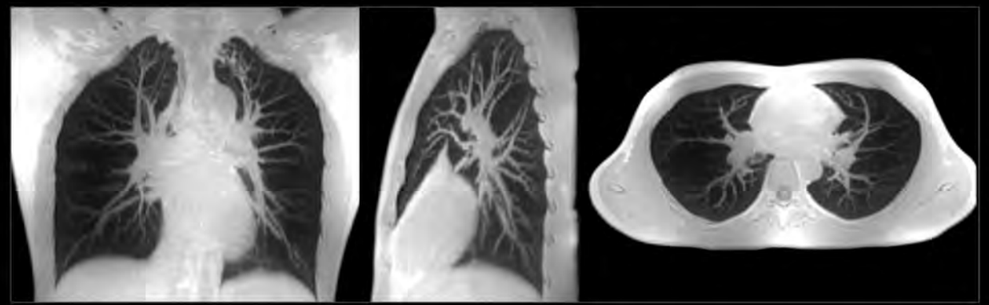
High Resolution Whole Body DWI

Significantly suppress deformation and improve image SNR

DWI b800
With EasyPlan

UTE Lung Imaging

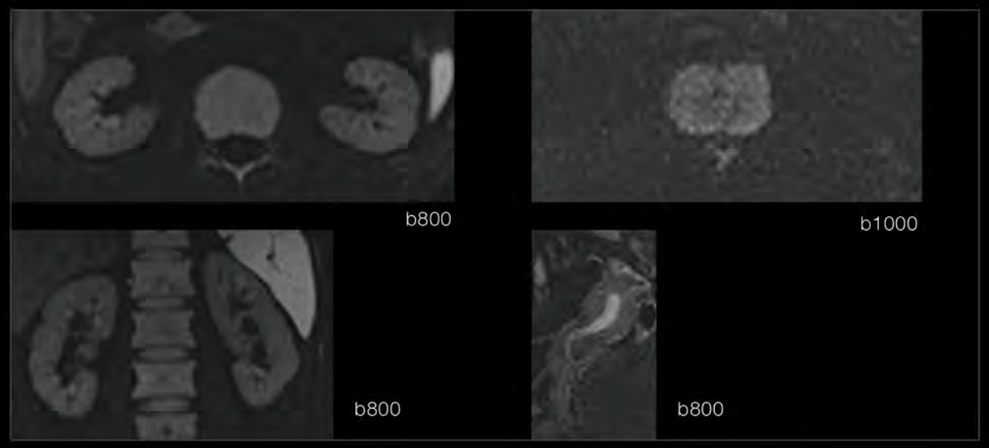
Without any radiation damage, achieve high resolution 3D isotropic imaging of the whole lung and high soft tissue resolution.



TE=0.16ms

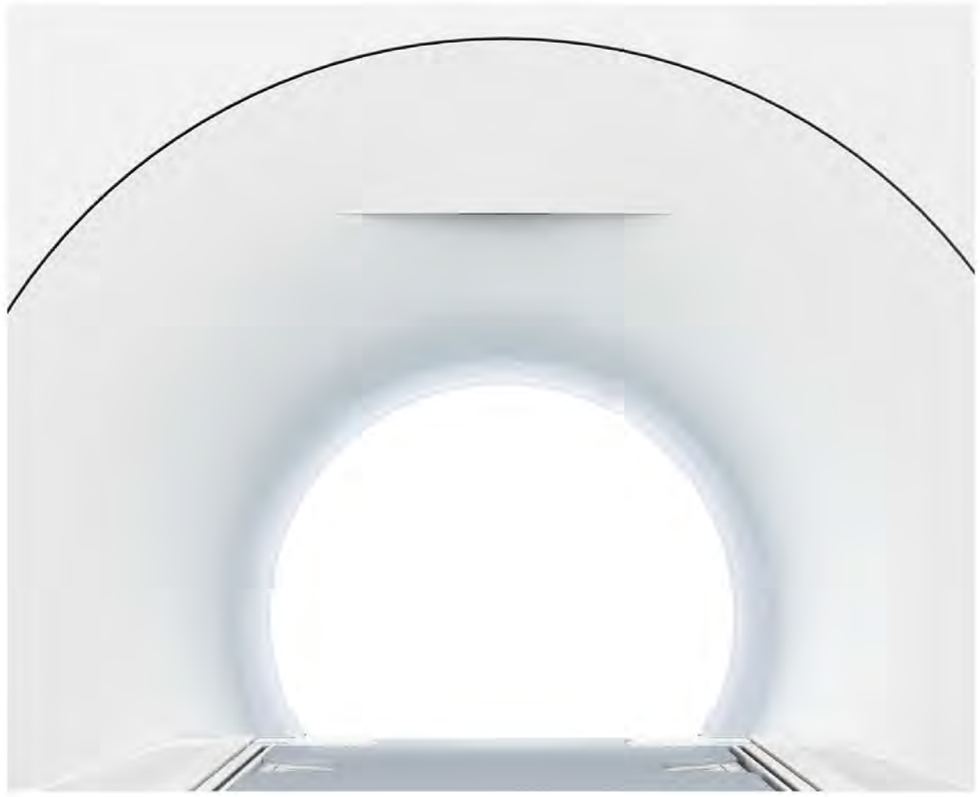
MicroView DWI

Achieve selective field-of-view imaging with less susceptibility artifacts, lower distortions and greater details.



Human-Centered Design

Focusing on user experience, uMR 670 combines accurate operation with a lightweight and artistic design. We bring aesthetic enjoyment and ease of use to the technology, delivering care, trust and respect through our design.



Pleasing Aesthetics

Our design scheme integrates oriental aesthetics with minimalism, presenting a seamless fusion of traditional and modern styling.

User-Friendly Design

The product design delivers comfort, safety, efficiency and ease-of-use. By applying ergonomic principles the uMR 670 combines innovative design with optimal functionality in order to provide a better possible user experience, optimizing patient comfort during the examination.

Sophisticated Craftsmanship

Driven by the tenets of precision design, we fine-tune every technological detail to embody the spirit of craftsmanship in every product.