

MAGNETOM Amira

The clever spin on 1.5T

siemens-healthineers.com/amira



SIEMENS
Healthineers 

MAGNETOM Amira

The clever spin on 1.5T

Providers and stakeholders around the world are working to increase the efficiency of healthcare systems. The goal: to achieve better outcomes for patients. MAGNETOM Amira provides answers to these modern-day challenges. Based on the unique Tim technology from Siemens Healthineers, this MRI scanner is specifically designed to enhance clinical capabilities. It helps extend care to a greater number of patients, improve the patient experience, and boost process efficiency – at a lower cost per scan.

Contents

Consistent quality, every day with standardized workflows	4
New clinical opportunities, every day with high-end applications	8
Financial certainty, every day with cost-cutting technologies	16

Consistent quality, every day with standardized workflows

Each patient is unique. Staff can fluctuate. Flexible strategies and efficient workflows help you prevent exam inconsistencies that can jeopardize productivity. MAGNETOM Amira simplifies processes and gives healthcare professionals total control and flexibility with myExam Companion.

myExam Companion

Using the new possibilities of digitalization and AI, data is turned into integrated expertise and tailored assistance.

myExam Companion comes in three different modes to provide tailored user assistance enabling consistent results.

myExam Autopilot

myExam Autopilot offers users most advanced and intelligent automation. It enables users to scan at high quality with just a simple click and has the potential to remove burdensome routine tasks.



Automate intelligently

myExam Assist

myExam Assist provides guided workflows. It allows for high quality, efficient exams even when conditions change.



Flexible and guided

myExam Cockpit

myExam Cockpit allows users to customize intuitively. It provides a central workspace for protocol management.



Customize intuitively

myExam Assist automated workflows and myExam Cockpit

myExam Assists

Flexibly guided

75 percent¹ of all exams are brain, spine, and MSK. MAGNETOM Amira comes with myExam Brain Assist, myExam Large Joint Assist, and myExam Spine Assist to automate and standardize your exams for the highest consistency across a broad variety of patients and indications.

The following myExam Assists are also available as options:

- myExam Angio Assist
- myExam Cardiac Assist
- myExam Breast Assist
- myExam Abdomen Assist
- myExam Liverlab Assist

Together they provide highly automated scan procedures for a variety of body regions with comprehensive guidance and predefined scan strategies. Powered by artificial intelligence, AutoAlign delivers automatic placement of imaging slices to ensure reproducible scan results – every time.

myExam Cockpit

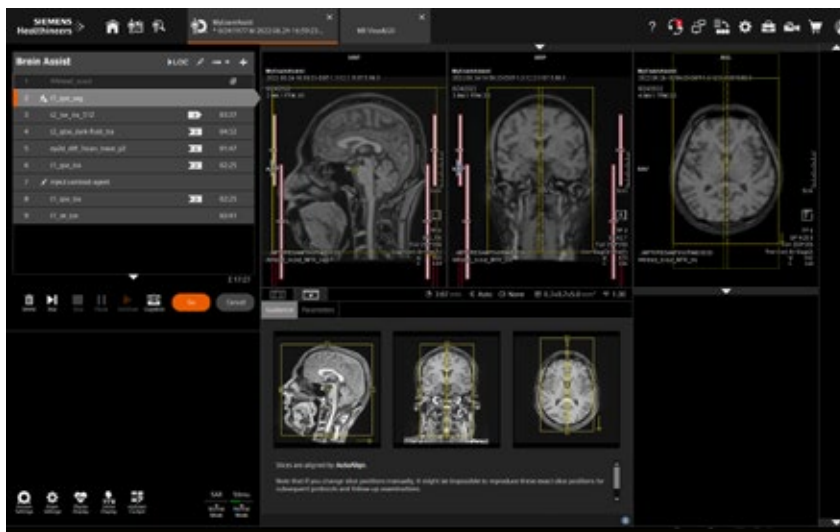
Intuitively customized

Consistent quality is achieved by eliminating variables that arise from varying acquisition techniques and/or non-optimized parameters. Via a central user interface, users can manage all myExam Assists in the myExam Cockpit and simplify protocol optimization, customization, and organization.

Common user interface

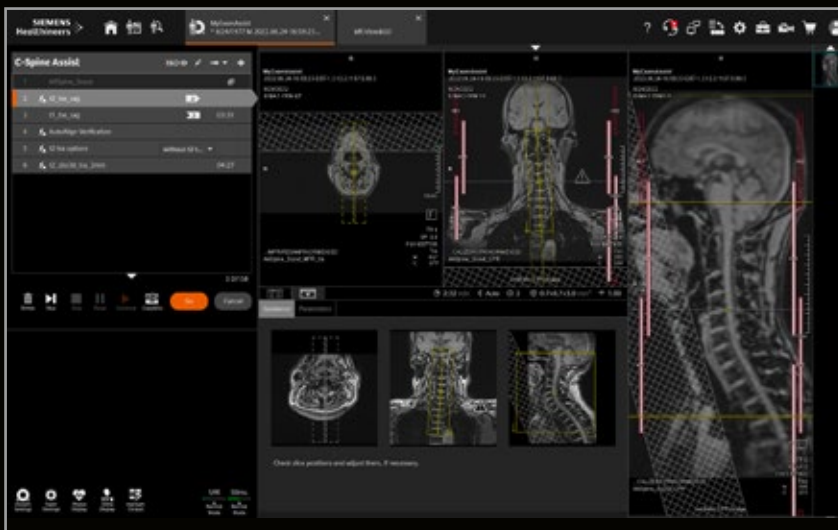
Simplifies staff training

The syngo MR XA software with myExam Companion runs on all current Siemens Healthineers MRI scanners. The familiar interface in this powerful software platform helps shorten learning curves and make cross-scanner training easier.

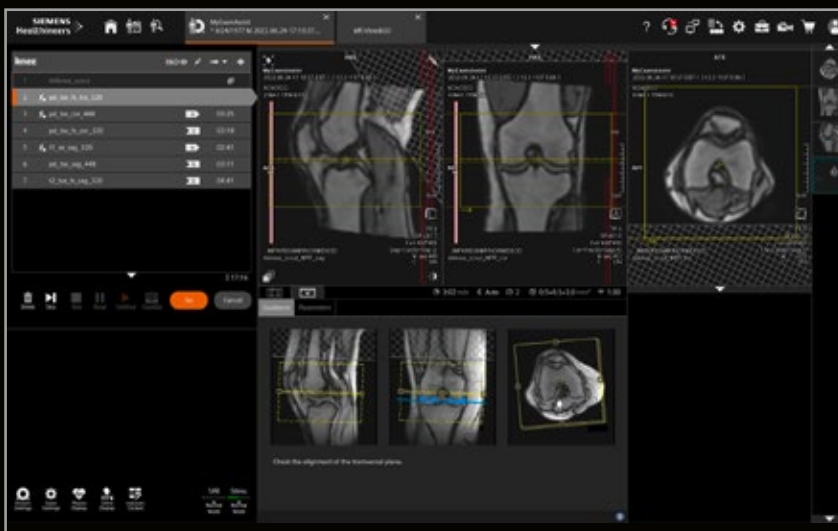


myExam Brain Assist

Consistent quality, every day



myExam Spine Assist



myExam Large Joint Assist

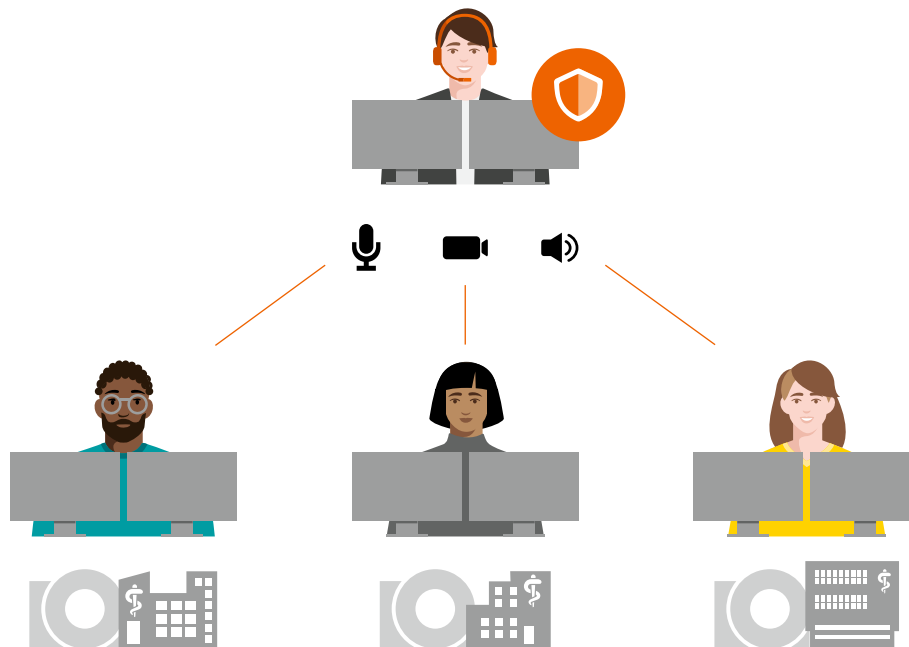


myExam Brain Autopilot

Move knowledge, not staff, with *syngo* Virtual Cockpit²

syngo Virtual Cockpit² is designed to support scan procedures – from a distance. Expert colleagues receive access to the scanner and can support less-experienced technologists – ensuring reproducible results across your entire MR system fleet.

- Each expert can assist on up to three scanners simultaneously
- Expert communicates with scanner operator via chat, video, or voice
- Assist MR, MR-PET, CT, and PET/CT scanners



For more information on *syngo* Virtual Cockpit²:
[siemens-healthineers.com/syngo-virtual-cockpit](https://www.siemens-healthineers.com/syngo-virtual-cockpit)

New clinical opportunities, every day with high-end applications

Setting the pace in MR acceleration with Turbo Suite

Turbo Suite for MAGNETOM Amira is comprised of three packages that include our unique parallel imaging, Simultaneous Multi-Slice³, and Compressed Sensing³ technologies. With Turbo Suite, you have access to the latest developments in MR acceleration.





Turbo Suite Essential

Be ahead in scan time and maximize productivity with core MR acceleration technologies

Turbo Suite Essential is our standard acceleration package for MAGNETOM Amira. This package leverages the high-element density coil, the parallel imaging technique GRAPPA, and our unique CAIPIRINHA to deliver routine exams in 10 to 15 minutes. Isotropic 3D MSK exams utilize the power of CAIPIRINHA, delivering all clinically relevant contrasts in around 10 minutes. For body imaging, up to 50 percent⁴ shorter breath-holds and high-resolution scans are possible with CAIPIRINHA.



Turbo Suite Excelerate³

Scan up to 50 percent faster⁴ in routine clinical exams

Turbo Suite Excelerate³ introduces a paradigm shift in productivity with up to 50 percent⁴ time savings in all contrasts, orientations, and body regions. Dramatically transform care delivery with cutting-edge acceleration technologies Simultaneous Multi-Slice and Compressed Sensing for static 2D and 3D imaging, covering neurological, orthopedic, and body MRI. In addition to our latest Simultaneous Multi-Slice applications for EPI and TSE, the Excelerate package provides access to new acceleration techniques, including Simultaneous Multi-Slice RESOLVE, Wave-Caipi and Compressed Sensing acceleration for SPACE, TOF, and SEMAC.



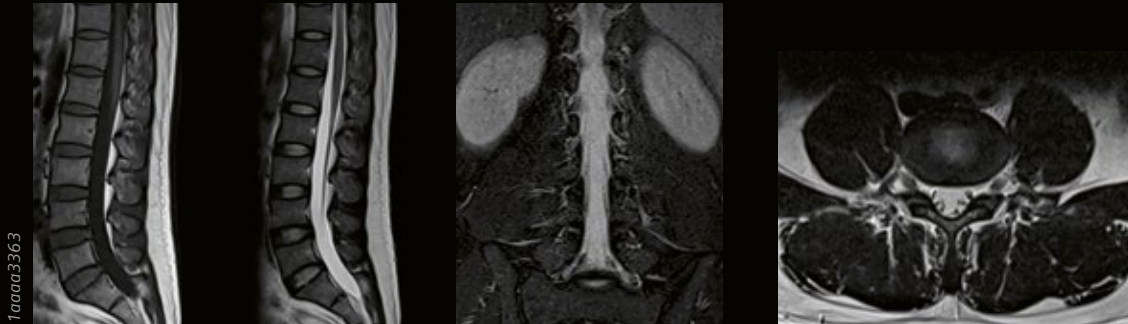
Turbo Suite Elite³

Increase the number of patients eligible for MRI

With Compressed Sensing GRASP-VIBE³, perform full free-breathing liver dynamics for greater patient comfort and fewer rescans. With Compressed Sensing Cardiac Cine³, cardiac function can be captured in one short scan with free breathing, even with the most challenging patients. With Turbo Suite Elite, you get continuous access to new cutting-edge MRI acceleration techniques.

Turbo Suite Essential

Total exam time
5:27 min



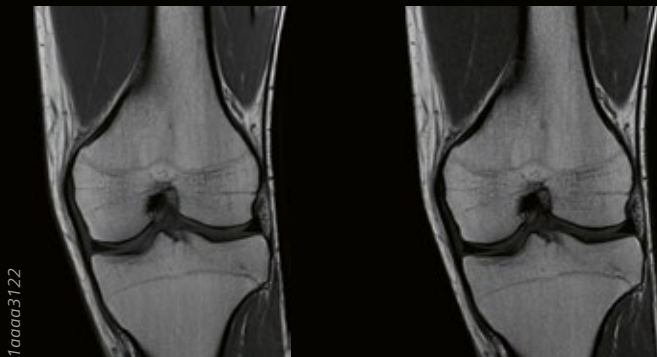
TSE T1, PAT 2
0.9 x 0.9 x 4 mm³
TA 1:22 min

TSE T2, PAT 2
0.9 x 0.9 x 4 mm³
TA 0:41 min

TSE T2 TIRM, PAT 2
0.5 x 0.5 x 4 mm³
TA 1:45 min

TSE T2, PAT 2
0.7 x 0.7 x 3.5 mm³
TA 1:18 min

Turbo Suite Excelerate

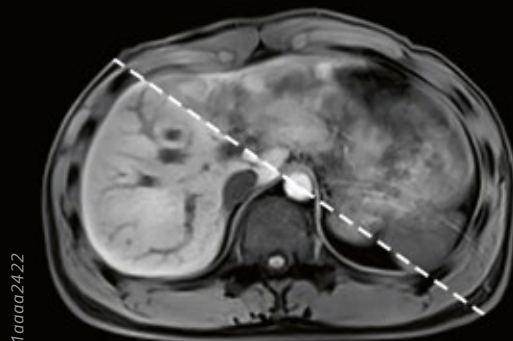


TSE T1
0.3 x 0.3 x 3 mm³
TA 4:40 min

TSE T1, PAT 2, SMS 2
0.3 x 0.3 x 3 mm³
TA 1:54 min

Turbo Suite Elite

Free breathing with
Compressed Sensing
GRASP-VIBE



Suboptimal
breath-hold VIBE

Deep Resolve Technology

Deep Resolve is an advanced reconstruction technology that increases image sharpness and scan speed based on deep neural networks and innovative MR noise reduction technique.

Deep Resolve Gain

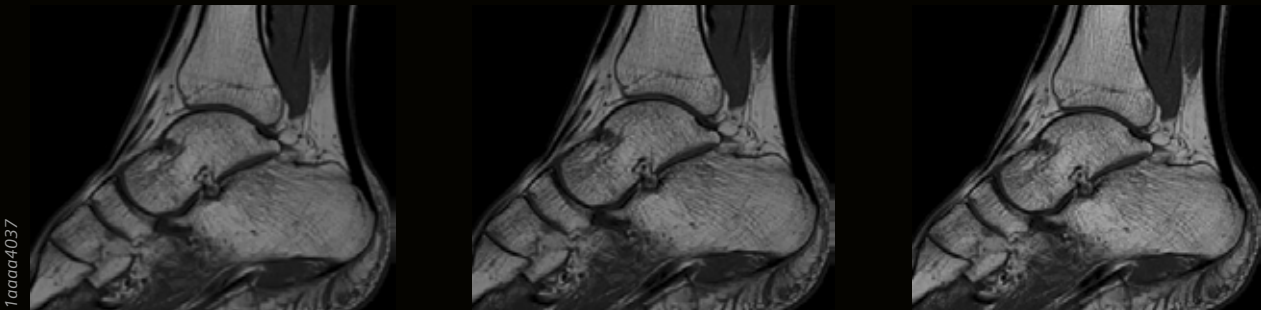
Deep Resolve Gain enables targeted denoising thus addressing local variations in image noise.

Deep Resolve Sharp

Deep Resolve Sharp is an AI-powered image reconstruction technology with a deep neural network at its core that increases the sharpness of the image.

Deep Resolve Boost

Deep Resolve Boost is a raw data-to-image deep learning reconstruction technology that enables high signal-to-noise (SNR) and radically accelerated image acquisition.



T1 TSE
0.6 x 0.6 x 3 mm³
TA 2:36 min

T1 SE
Deep Resolve Gain
0.3 x 0.3 x 3 mm³
TA 2:36 min

T1 SE
Deep Resolve Gain & Sharp
0.3 x 0.3 x 3 mm³
TA 2:36 min

Streamline your MRI workflow

Optimize and streamline your entire MRI workflow from end-to-end with MAGNETOM Amira. Save valuable staff time and enable precise patient scheduling, thanks to automation and standardized workflow steps.



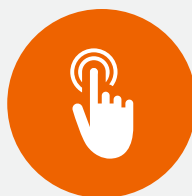
System Start-up Timer

With the System Start-up Timer, your system boots automatically and is ready for scanning on time, every day. Start your exam right away and potentially scan one more patient per day.



myExam Assist

The intuitive myExam Assist offers automatic placement of imaging slices with the AI powered AutoAlign functionality – making even whole spine imaging a push-button exam.



AutoPosition

Accurate positioning of the anatomy (for selected exams) in the isocenter with no need for laser light positioning.



GO Applications

GOBrain and GOBrain+ are push-button, clinically validated neuro brain protocols optimized for a short acquisition time. GOKnee3D is a fast, push-button, clinically validated knee examination using 3D high-resolution isotropic protocols enabled by SPACE and the CAIPIRINHA technique.



View&GO

Dual monitors³ allow the user to efficiently check and distribute results in real time. In addition, advanced applications like generating computed high b-value images or 3D reconstructions of the plexus can be performed right at the scanner, reducing the workload for radiologists.



10-min Exam

The 10-min Exam provides fast protocols for the most common MRI examinations for the anatomies brain, spine, and the large joints.



Recon&GO

Recon&GO automatically performs postprocessing steps in the background. For example, vertebrae in the sagittal, axial, and coronal views are automatically labeled in all contrasts.



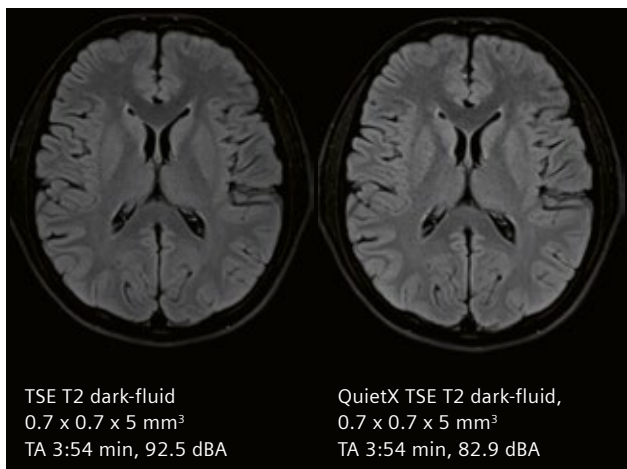
Enhance patient experience

The patient experience matters. MAGNETOM Amira incorporates features that provide an improved patient experience during MRI exams.

Quiet Suite

Staying competitive in a changing healthcare environment can be challenging. Today's patients have more freedom of choice, and their satisfaction plays an ever-greater role in securing business. MAGNETOM Amira helps you differentiate your services and become more competitive – for example, by increasing patient comfort while reducing sound pressure in MRI exams by up to 97 percent⁴.

Quiet Suite contains optimized protocols for complete neurological and orthopedic exams, QuietX for TSE, SE, GRE, DWI sequences, plus the almost inaudible PETRA sequence.



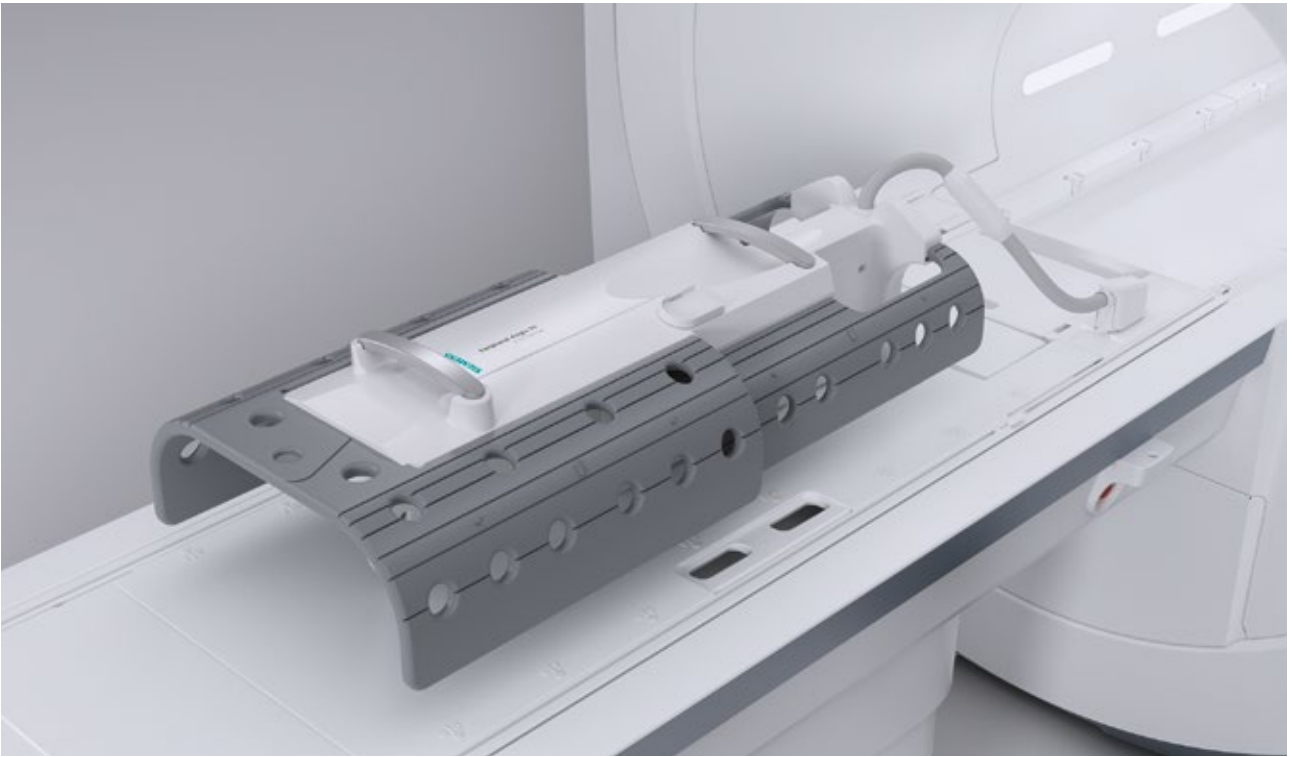
Tim 4G coils

Tim 4G coils provide more comfort and speed and a high image quality at the same time.

MAGNETOM Amira offers a wide range of new high-density coils. Powered by Tim 4G, the Body 13 coil that weighs only 1.4 kg (0.9 kg without cable), helps to reduce stress and improves the patient experience during body exams. It features the unique SlideConnect feature that allows the coil to be plugged in easily with one hand using a sliding motion.

New anatomically adaptive coils like the Shoulder Shape 16³, iTX Extremity 18 Flare³, and UltraFlex 18³ coils are specifically designed to accommodate the patient's anatomy comfortably while maintaining high SNR and easy positioning. These ultra-high-density coils are especially suitable for MSK imaging, and they support high acceleration techniques like Simultaneous Multi-Slice³.

Unique in this segment is the Peripheral Angio 16 coil which allows both legs to be imaged for high-resolution angiography or bilateral long bones. It allows both legs to be independently covered with coil elements, thereby maximizing the coil filling factor and maximizing SNR. This is approximately two times higher SNR when comparing with imaging using a surface body coil.



Peripheral Angio 16



UltraFlex 18 Large and Small

Financial certainty, every day with cost-cutting technologies

Jointly towards a sustainable future

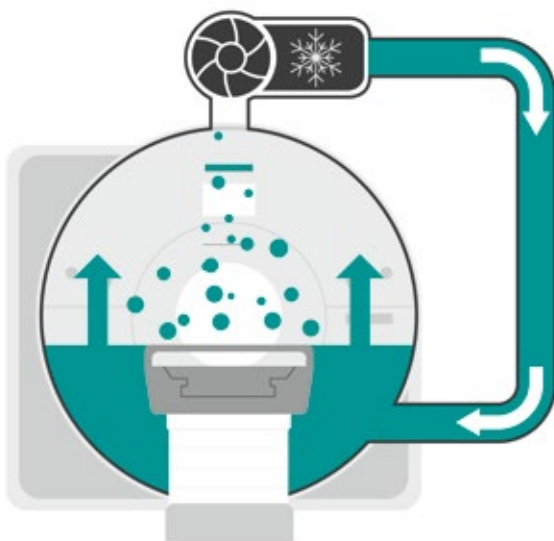
Eco Power Mode

MAGNETOM Amira incorporates the Eco Power Mode for up to 30 percent⁴ savings in energy consumption during system stand-by and system off-modes. This means that the cold head compressor is automatically switched off during prolonged system idle while maintaining zero helium boil-off. In addition, energy is saved by disabling the Gradient Power Amplifier during system idle times: for example, when the table remains in the home position for a longer period of time.

Zero Helium Boil-off

Reduce lifecycle costs and improve your eco-footprint – with Zero Helium Boil-off technology and minimum power and cooling demands. All of this adds up to enhanced performance, lower resource consumption, and greater investment protection.

With its low space requirements and low connection values, MAGNETOM Amira is easy to site, which enables its use in existing infrastructures and reduces installation costs.



Reduce energy consumption by 30 percent⁴ when system is not in use

International version.

Not for distribution or use in the U.S.

MAGNETOM Amira is not commercially available in all countries. Due to regulatory reasons, its future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products/services/features included in this brochure are available through the Siemens Healthineers sales organization worldwide. Availability and packaging may vary by country and are subject to change without prior notice.

The information in this document contains general descriptions of the technical options available and may not always apply in individual cases.

Siemens Healthineers reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Healthineers sales representative for the most current information.

In the interest of complying with legal requirements concerning the environmental compatibility of our products (protection of natural resources and waste conservation), we may recycle certain components where legally permissible. For recycled components we use the same extensive quality assurance measures as for factory-new components.

Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

For accessories, please visit:

[siemens-healthineers.com/medical-accessories](https://www.siemens-healthineers.com/medical-accessories)

¹ Evaluation of MRI utilization. Based on 2.2 million Siemens Healthineers MR examinations in 2013.

² syngo Virtual Cockpit is not commercially available yet in all countries. Its future availability cannot be guaranteed.

³ Optional.

⁴ Data on file. Results may vary.

Siemens Healthineers Headquarters

Siemens Healthineers AG
Siemensstr. 3
91301 Forchheim, Germany
Phone: +49 9191 18-0
[siemens-healthineers.com](https://www.siemens-healthineers.com)

Manufacturer

Siemens Shenzhen
Magnetic Resonance Ltd.
Siemens MRI Center
Gaoxin C. Ave., 2nd
Hi-Tech Industrial Park
518057 Shenzhen, China