Key differentiators

Contents

> Gradients

> BioMatrix

> Tim 4G

> Coils

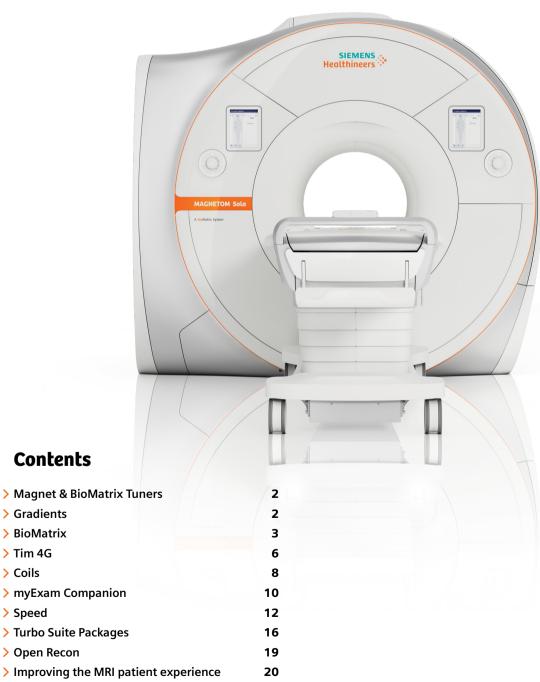
> Speed

> Open Recon

> MRI Life Design

MAGNETOM Sola

siemens-healthineers.us/magnetom-sola



21

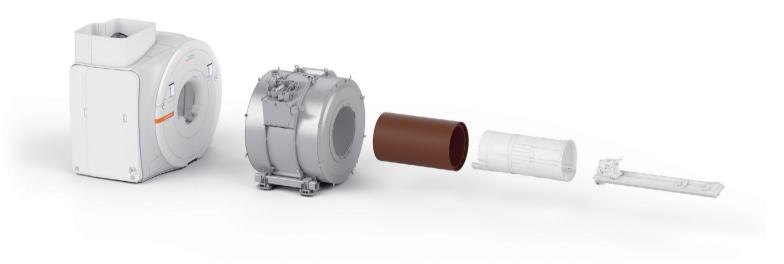




Magnet & BioMatrix Tuners

The all new design of MAGNETOM Sola incorporates both a short magnet with a 157 cm system length (cover to cover), plus a patient-friendly, 70 cm Open-bore. The magnet maintains excellent homogeneity over a large 50 x 50 x 50 cm3 field of view (FOV). The unique BioMatrix Tuners, CoilShim and SliceAdjust, further enhance homogeneity by applying patient-specific and region-specific shim optimization in critical regions. This results in robust and reliable fat saturation throughout the entire imaging volume, especially important for: abdominal, off-center, large-FOV and long bone imaging. In addition, the system provides active shielding and zero helium boil-off technology.

Features a large 50 x 50 x 50 cm³ field of view



Gradients

The MAGNETOM Sola gradient amplifier comes in a modular and highly compact design with ultra-fast, solid-state technology and low switching losses. Depending on your clinical needs, two gradient power versions are available:

- XJ: 33mT/m max. amplitude with a maximum slew rate of 125T/m/s
- XQ: 45mT/m max. amplitude with a maximum slew rate of 200T/m/s

The scanner uses passive and active shimming. A special MAGNETOM Sola Cardiovascular Edition with XQ gradients is available for installations where cardiac will be the primary focus.

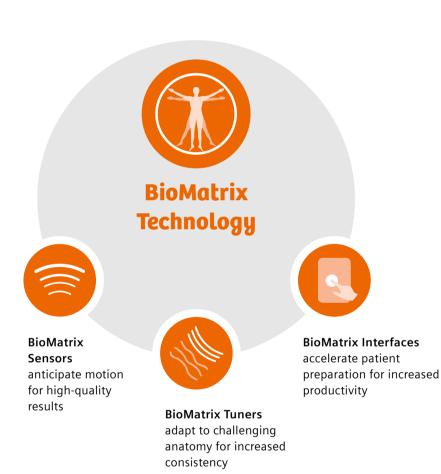
Powerful gradients XJ: 33 mT/m @ 125 T/m/s XQ: 45 mT/m @ 200 T/m/s



BioMatrix

Patients have unique, individual characteristics—biovariability. Different physiologies and anatomies—and how each patient interacts with the MRI technology—may cause variations in the imaging results. BioMatrix Technology helps to overcome these challenges by automatically adjusting to patient biovariability. By embracing human nature in this way, we can personalize the MRI examination and help expand precision medicine.

The three key pillars of the BioMatrix family that drive consistency and efficiency in the face of biovariability are BioMatrix Sensors, BioMatrix Tuners and BioMatrix Interfaces.







BioMatrix Sensors

Anticipate motion for high-quality results

The unique Respiratory Sensors in the BioMatrix Spine coils automatically detect breathing patterns as soon as the patient lies on the table. This speeds up patient setup especially when respiratory triggering is needed for image acquisition. There is no need for an additional respiratory bellows or belt. The detected respiratory motion is immediately displayed on the BioMatrix Interface as a respiratory curve.





BioMatrix¹ Beat Sensor

Cardiac MRI exams without ECG

The BioMatrix Beat Sensor measures the motion of the heart and provides an alternative to ECG triggering. This improves the cardiac MR experience by: removing the need to expose the patient, saving time shaving the patient, and eliminating ECG learning time.



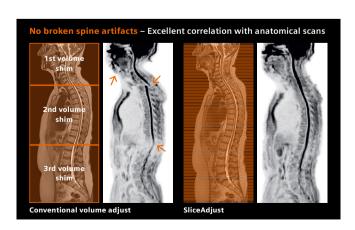


BioMatrix Tuners

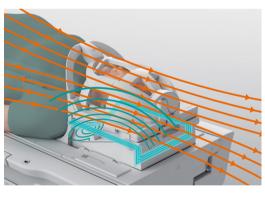
Adapt to challenging anatomies for reliable exams

CoilShim²

Integrated into the new BioMatrix Head/Neck coils, CoilShim increases diagnostic quality and reduces the need for repeat scans by delivering improved fat saturation, better DWI and TSE quality in the neck region. Additional shim elements directly integrated into the BioMatrix Head/Neck coil perform region-specific shimming for a more homogeneous BO field in the challenging head and neck region.



Standard on the Sola 32. Optional on the Sola 48 and 64.



SliceAdjust

In a typical MR scanner, B0 field inhomogeneity resulting from a patient's anatomy is corrected by the standard volume shim. However, for multi-station exams, volume shimming has its limitations, for example, at station boundaries. This typically leads to "broken spine" artifacts in whole-body DWI or impaired fat saturation in multi-station TSE. With BioMatrix SliceAdjust, precise slice-by-slice shimming is performed to eliminate the inaccuracies of a conventional volume shim. SliceAdjust delivers excellent DWI quality, providing excellent correlation to anatomical scans and improving fat saturation in TSE scans.

²Optional for the 32CH Sola.





BioMatrix Interfaces

Accelerate patient preparation for increased efficiency

Select&GO

With one-touch positioning using the Select&GO display, based on the underlying BioMatrix Body Model, artificial intelligence is used to accelerate patient positioning by up to 30%.¹ The body region to be scanned is automatically displayed on the touch display depending on which set of coils is plugged into the table. As soon as the body region of interest is selected, the patient is moved to iso-center without activating the laser light. Delays due to incorrect positioning can now be avoided.

BioMatrix Select&GO accelerates patient positioning—powered by AI



Dockable Table²

The BioMatrix Dockable Table enables fast and easy patient setup. The multi-directional navigation wheel and 360-degree flexibility make patient handling easy. Also, the possibility to lower the table to 52 cm guarantees an easy patient transfer. The fast, automated push-button AutoDock functionality allows maneuvering without peddles. A receiving port guides the table for easy alignment into the scanner. The optional eDrive support provides motorized assistance so that even the heaviest patient can be moved effortlessly to and from the MRI scanner.



Easy and intuitive interface

Sensitive to user touch

Effortless maneuverability with eDrive assistance

Up to 550 lbs

>>>

Easy docking with AutoDock

No pedals required



Tim 4G Technology

Deliver exceptional image quality and speed with Tim 4G

Tim is the integrated coil technology that revolutionized MRI. Tim 4G is now in its 4th generation.

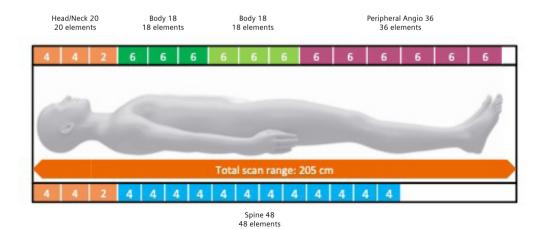
Tim 4G features DirectRF, a fully digital system of RF receive and RF transmit. This is unique in the market. Both the receivers and the transmitter are situated directly at the magnet. This ensures a very close relationship between all critical components (receiver, transmitter, body coil, gradient coil) with real-time feedback loops that result in tight control of all components simultaneously, for the highest accuracy.

On the receive side, care was taken to have the receivers as close to the receiving coils as possible—but not on the coils themselves, where they would only add weight and bulk and make the coils more expensive, without providing any clinical benefit. Additionally due to the integrated pre-amplifiers, the full SNR is preserved.

The most relevant differentiator of our RF systems is the number of independent RF channels working in combination with the high element density coils. Together they maximize use of the channels. For example, Tim 4G with the MAGNETOM Sola offers up to 64 independent RF channels. Sola also provides coils and coil combinations with the highest element density in the market to augment the 64 channels.

What is the benefit of high coil element density? High coil element density combined with a high number of RF channels allows for higher SNR and higher speed with higher PAT factors. The figure below demonstrates up to 205 cm of total scan range with Tim 4G's unique coils.

Highest channel count up to 204 channels connected simultaneously



Example coil coverage from a MAGNETOM Sola [204 x 64]



TIM 4G Coil Solutions

With one of the broadest coil portfolio's in the industry—the ultra-lightweight coils drive functionality and solve key clinical and workflow needs:

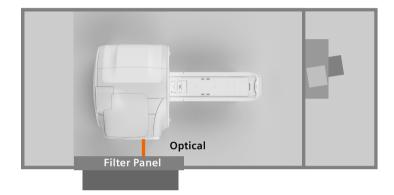
DirectRF

As discussed earlier. Direct RF provides integration of all transmit and receive components at the magnet, enabled by the unique digital-in and digital-out design with fiberoptic cables between the magnet and equipment room.

- Enabler for real-time feedback loops
- Higher signal purity and improved stability
- Enhanced image quality, less noise
- Easier siting

DirectRF

- Better image quality, less noise
- Higher signal purity and improved stability
- Easier siting



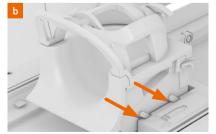
DirectConnect and SlideConnect

DirectConnect and SlideConnect technology enable one-hand operation. This results in easy handling and helps to speed up the workflow even further.

Your advantages:

- Up to 40%* faster body imaging with Tim 4G due to its ultra-high coil element density, enabling more SNR and speed.
- Maximum 205 cm scan range without repositioning the patient when large coverage is required.
- Light-weight coil design for fast setup and increased patient comfort.
- Accelerated workflow with DirectConnect, cable-less coils for spine, head/neck and foot/ankle and SlideConnect technology on all other coils for easy one-handed operation.







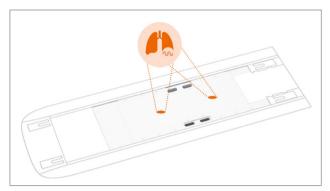
(a) Light-weight Body 18 coil on the integrated Spine 32 coil; easy-to-use and fast coil connection with (b) DirectConnect and (c) SlideConnect.

^{*}Data on file.

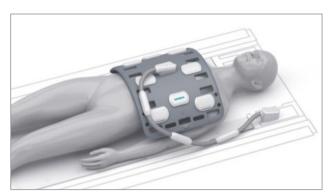


Flexible and Patient Friendly Coils

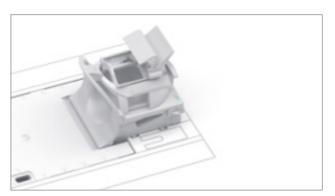
A comprehensive set of coils included Designed to Support All Your Imaging Needs



BioMatrix Spine 24, 32 & Spine 48 with Respiratory Sensors³



BioMatrix Body 125/Body 182



BioMatrix Head/Neck 20 Tiltable and with Coilshim⁴



Flex 4 Large/Small

Wide Portfolio of Optional Coils

UltraFlex 18 Coils (Small & Large)1

The UltraFlex 18 coils provide a light-weight, blanket-like feel with the added benefit of breathability. The flexible coils adapt to the patient's anatomy (no fixation straps needed), easily contouring to their body, reducing anxiety.

- Dual-Density Signal Transfer enables the ultra-high density coil design by integrating key RF components into the UltraFlex 18
- Dedicated positioning Aids for shoulder, knee, elbow and foot/ankle for easy and comfortable patient positioning
- 18-channel design
- iPAT-compatible
- Stackable with the Body 12 or Body 18

0.55 in

0.55 in

UltraFlex Large 18¹
 UltraFlex Small 18¹

 Weight
 4 lb
 3.1 lb

 Dimensions (L x W x H)
 23.2 in x
 16.1 in x

¹Ontiona

²Prerequisite: Tim [204 x 48] or higher.

³Pre-Requisites: BioMatrix Spine 24 is [204 x 32],

BioMatrix Spine 32 is [204 \times 48], BioMatrix Spine 48 is [204 \times 64].

 $^{^4}$ Optional for Tim [204 x 32], standard for Tim [204 x 48] or higher.

⁵Standard for Tim [204 x 32].



BioMatrix Body 18 & BioMatrix Body 18 long^{1,2}

The BioMatrix Body 18 expands the coil portfolio as a patient-friendly, flexible, and high element density coil. With an integrated Beat Sensor³, the breathable coil also incorporates the SlideConnect feature as well as exchangeable cable design for efficient positioning.

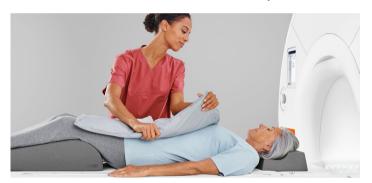




- Integrated Cardiac Beat Sensor³
- Can be combined with additional BioMatrix Body 18 coils for larger coverage

Contour 24/48¹

Contour 24 & Contour 48 are soft and flexible Tim 4G coils that adapt to the patient's anatomy and body contour. The coils improve efficiency and reduce anxiety as fixation straps are not needed. Depending on application need, the coil can be used on either side as well as any orientation.



- No fixation straps needed
- Can be used in any orientation

16 Ch Ortho Coils1



Accommodate more patients with a flared opening



Full hand and wrist coverage

Tx/Rx Knee 18



Optimal fit to patient anatomy with flexible coil elements

Hand/Wrist 16

Foot/Ankle 16



Secures the anatomy for motion free imaging

Shoulder Shape 16

¹Optional

²Prerequisite: Tim [204 x 48] or higher, otherwise optional.

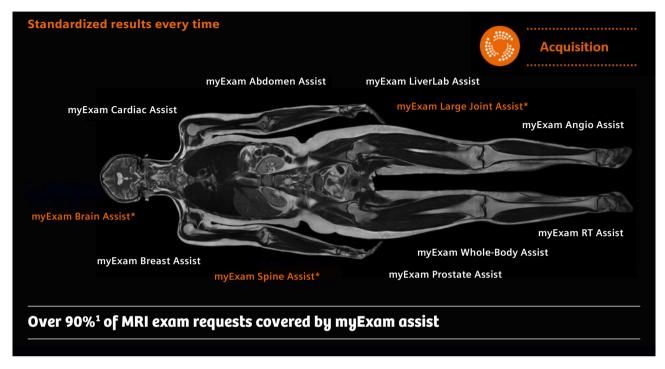
³The Beat Sensor is designed for automatic cardiac triggering. The Cardiac Triggering functionality is still under development and not commercially available yet. Its future availability cannot be ensured. The Cardiac Triggering functionality is planned to be activated with a future software update.



myExam Companion

11 myExam assists deliver consistent, reproducible results from head to toe

myExam assist with MAGNETOM Sola



myExam Companion breaks down the barriers of complex MRI operations using a new philosophy on how to operate MRI. It leverages the new possibilities of digitalization and AI, to turn data into integrated expertise and tailored assistance.

The myExam Autopilot, Assist and Cockpit helps users efficiently achieve high-quality results – regardless of their experience level, the patient, or throughput.

Which mode should you work with?

Different modes. Different use cases. Consistent IQ: Powered by AI myExam Companion provides tailored user assistance enabling consistent and reproducible results.

myExam Autopilot

myExam Autopilot offers the 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

- MRI operation drastically simplified
- Automated protocol without the need for any manual adjustments
- Clear design with a focus on what users need and without any distractions
- Novel usability with touch or click interaction



^{*}Standard

¹Evaluation of 9 million Siemens MR exams, 2014.



myExam Assist

myExam Assist provides guided workflows. Users can select exam strategies or flexibly adapt them based on the patient's condition. It allows for high quality, efficient exams even when conditions change.

Flexible and guided

- Standardized exam strategies for all supported body regions
- Decision logic for consistent adaptations
- Useful automation with automated slice/volume positioning



myExam Cockpit

myExam Cockpit allows users to customize intuitively. It provides a central workspace for protocol management. Users can set up and maintain protocols, build knowledge into standardized exams and make those continuously available for every user in the MRI department.

Customize intuitively

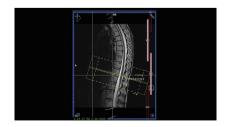
- Configure all your protocols to your individual needs
- Configure and set-up myExam Autopilot or Assist programs
- Efficient protocol management with explorer and editor in one
- Instantly edit, save, and run your protocols for maximum flexibility even during an examination



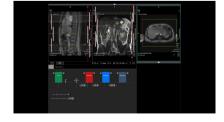
Autosuite

Integrated Autosuite – powered by AI

Providing ease-of-use, consistency, and reproducibiltiy in myExam Autopilot or Assist while remaining customizable to your standards in myExam Cockpit.



AutoAlign, AutoCoverage, and AutoFoVFor consistent slice or volume coverage and orientation



AutoBolus Detection and AutoVoice Commands For consistent timing of breathing or contrast in dynamic imaging



AutoLabeling and AutoCoil Select Eliminate the need for manual coil selection or labeling tasks



Speed

Deep Resolve

Deep Resolve is an Al-powered image reconstruction technology that takes advantage of convolutional neural networks to accelerate MRI scans faster than ever before while simultaneously increasing resolution.



Increase department throughput

Drive improved efficiency



Increase in image resolution

Improve diagnostic confidence



Patient comfort in the MR

Faster exams = less table time



Schedule flexibility

Administrative support



Increase clinical referrals

Expand services



What is it?

Deep Resolve Gain is a targeted denoising method to increase the MRI signal of images. With this, either shorter scan times or higher resolution can be achieved.

How does it work?

The acquired MRI system generates a patient specific, targeted noise map which reflects spatial noise variations. The MR image and the corresponding targeted noise map are subtracted in an iterative process to remove excess noise which does not add value to the final MRI image.



What problem does it solve?

MRI coil geometry and patient variability can create unnecessary noise in MR images. The noise impairs the signal of the MRI image and can decrease image quality. Deep Resolve Gain directly addresses the removal of the signal not contributing to the image.

What is the key differentiator?

Deep Resolve Gain targets the local noise variation introduced by each MRI patient and the corresponding RF coil via the iterative principle, similar to compresed sensing, but focused on noise removal.



Deep Resolve Sharp

What is it?

Trained on over 10,000 pairs of low-res and high-res MR data, Deep Resolve Sharp reconstructs a higher resolution image from low resolution data via the AI network.

How does it work?

A low-res image is reconstructed from the low-res data into a sharper, higher resolution image. Data consistency with the acquired raw data is ensured as part of the final image reconstruction. The result is an image with sharper edges and up to a 2x improvement of in-plane resolution.



What problem does it solve?

Typically, in MRI, you can either have a longer scan that acquires a lot of data and provides high resolution or a quicker scan, less data – but lower resolution. Why not have the best of both scenarios with Deep Resolve Sharp.

What is the key differentiator?

The AI network can generate high-res output from low-res input because it has been trained on many pairs of high and low-res images, enabling the software to anticipate where to expect a sharp edge in an image.

Deep Resolve Boost

What is it?

Deep Resolve Boost enables super resolution at imaging speeds never before possible.

How does it work?

Leveraging raw data from a reduced, and thus faster scan as input, a deep neural network is applied multiple times in an iterative process to generate the final output with significantly reduced noise. The integration of the raw data along the entire reconstruction process leads to unmatched performance and ensures data integrity.

What problem does it solve?

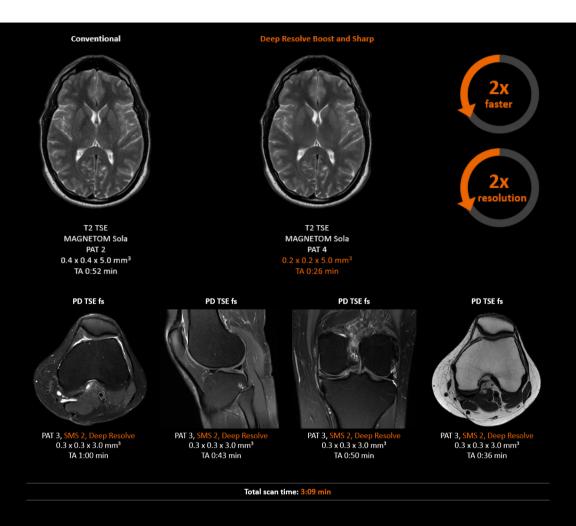
With conventional reconstruction methods, a highly accelerated image acquisition will lead to strong noise contamination and/or artifacts. The reconstruction with Deep Resolve Boost enables the generation of images with extremely high MRI signal and a superfast image acquisition simultaneously.

What is the key differentiator?

Deep Resolve Boost can be combined with Deep Resolve Sharp as well as Simultaneous Multi-Slice (SMS) for amazingly fast accelerations and super-resolution across all anatomies.







Simultaneous Multi-Slice¹

SMS is a revolutionary method to significantly reduce imaging times for TSE, diffusion, and BOLD imaging through simultaneous excitation and readout of multiple slices. It is the only acceleration technique that does not result in SNR-related losses due to subsampling as opposed to iPAT. Implementation includes a multiband pulse coupled with the blipped CAIPIRINHA technique to minimize g-factor-related SNR penalties.

SMS for the TSE sequence reduces scan times, and/or increases slice coverage/resolution at similar scan times. SMS TSE is unique and is particularly beneficial in MSK imaging, which accounts for a major proportion of daily routine exams.

SMS RESOLVE (REadout Segmentation Of Long Variable Echo trains) delivers high-resolution, low-distortion, diffusion-weighted imaging (DWI) for accurate depiction of lesions. Additionally, this technique is largely insensitive to susceptibility effects, providing detailed anatomy-true diffusion imaging of the brain, spine, breast and prostate.



Compressed Sensing¹

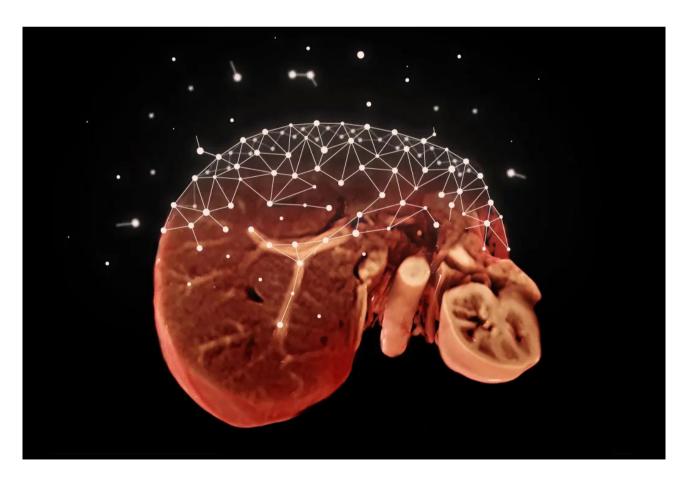
Compressed Sensing is an acceleration technique that incorporates sparse, incoherent subsampling followed by iterative reconstruction. Compressed Sensing in static imaging includes Compressed Sensing SPACE, Compressed Sensing Time-of-Flight (ToF), and Compressed Sensing SEMAC for metal artifact reduction². Compared with other static exams, these Compressed Sensing applications benefit from intrinsic sparsity, which allows higher acceleration factors.

Compressed Sensing GRASP-VIBE¹

With Compressed Sensing GRASP-VIBE, you can expand the patient population eligible for abdominal MRI. Patients who cannot hold their breath or follow breathing commands, including those with dementia and hearing impairments, children, or multi-morbid patients, can now undergo high-resolution dynamic abdominal imaging. With the push of a button, Compressed Sensing GRASP-VIBE's intelligent reconstruction and processing framework instantly recognizes different phases of liver dynamics, automatically labels them, and outputs only the clinically relevant information.

Highlights and benefits:

- Perform push-button, free-breathing liver dynamics in clinical routine
- Overcome timing challenges in dynamic imaging and respiratory artifacts
- Expand the patient population eligible for abdominal MRI
- Auto Bolus Detection
- AutoLabeling of relevant phases (pre-contrast, arterial, portal-venous and delayed)
- Self-gating for further reduction of residual motion blur
- Optimized clinical protocols for the abdomen



¹Optional



Turbo Suite Packages

To maximize value for our customers, we created three Turbo Suite packages consisting of a combination of various acceleration techniques. Each package is optimized and suitable for different sequences and body regions.

Turbo Suite Essential

Turbo Suite Essential comprises established acceleration techniques such as iPAT, iPAT², T-PAT, and the unique CAIPIRINHA to maximize productivity for all contrasts and orientations in routine imaging from head to toe. CAIPIRINHA can be applied to volumetric 3D imaging that supports iPAT² for body, neuro, or MSK imaging.

Turbo Suite Essential provides unique parallel imaging techniques for routine examinations in 10 – 15 minutes² scan time

Turbo Suite Excelerate¹

Turbo Suite Excelerate comprises cutting-edge acceleration techniques such as Simultaneous Multi-Slice (SMS) and Compressed Sensing for static 2D and static 3D imaging applications in Neuro, MSK, and Body MRI.

Turbo Suite Excelerate enables time savings, for all contrasts, orientations, and body regions by up to 50%²

Turbo Suite Elite¹

Turbo Suite Elite comprises cutting-edge Compressed Sensing applications for advanced abdominal and cardiovascular imaging with dynamic 2D and dynamic 3D applications. It includes Compressed Sensing GRASP-VIBE, Compressed Sensing Cardiac Cine, as well as TWIST, TWIST-VIBE, and StarVIBE.

Turbo Suite Elite provides unique Compressed Sensing for dynamic and full freebreathing liver and cardiac examinations

Turbo Suite Essential

Routine exams in 10-15 minutes

iPAT
CAIPIRINHA
VIBE
CAIPIRINHA
SPACE

Turbo Suite Excelerate

Up to 50% time savings



SMS DWI SMS TSE SMS RESOLVE CS TOF CS SPACE CS SEMAC

Turbo Suite Elite

Expand clinical capabilities



CS Cardiac Cine CS GRASP-VIBE FREEZEit + TWIST

¹Optional

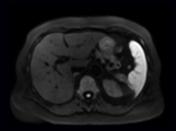
²Data on file.



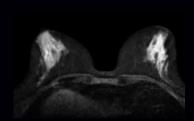
Conventional



PD TSE, PAT 2 0.4 x 0.4 x 3 mm¹ TA 2:14 min



DWI, PAT 3, b800 1.6 x 1.6 x 6.0 mm¹ TA 3:09 min



RESOLVE, b800 1.6 x 1.6 x 6.0 mm¹ TA 5:22 min

53% reduction

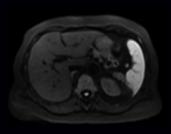
50% reduction

45% reduction

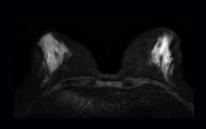
Turbo Suite Excelerate with Simultaneous Multi-Slice and Compressed Sensing



PD TSE SMS, PAT 2, SMS 2 0.4 x 0.4 x 3 mm¹ TA 1:03 min 1agaq1659



SMS DWI, PAT 2, SMS 2, b800 1.6 x 1.6 x 6.0 mm¹ TA 1:35 min



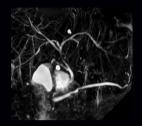
SMS RESOLVE, SMS 2, b800 1.6 x 1.6 x 6.0 mm¹ TA 2:58 min

 $^{^{\}rm 1} Subject$ to variability based on region specific requirements.

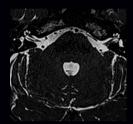




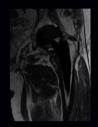
3D TOF MIP 0.5 mm iso TA 6:40 min



T2 SPACE MIP, MRCP, PAT 3 0.5 x 0.5 x 1.0 mm¹ TA 5:51 min respiratory triggered



T2 SPACE, PAT 2 0.3 x 0.3 x 0.6 mm¹ TA 5:13 min



SEMAC², PAT 3 0.9 x 0.9 x 3.0 mm¹ TA 6:54 min

70% reduction

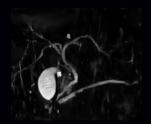
96% reduction

55% reduction

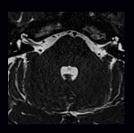
56% reduction



3D CS TOF Angio MIP 0.5 mm iso TA 2:00 min



T2 SPACE MIP, MRCP, CS 23 0.5 x 0.5 x 1.7 mm¹ TA 0:15 min breath-hold



CS T2 SPACE, CS 6 0.3 x 0.3 x 0.6 mm¹ TA 2:20 min



CS SEMAC², CS 8 0.9 x 0.9 x 3.0 mm¹ TA 3:03 min

¹Subject to variability based on region specific requirements.

²The MRI restrictions (if any) of the metal implant must be considered prior to patient undergoing MRI exam. MR imaging of patients with metallic implants brings specific risks. However, certain implants are approved by the governing regulatory bodies to be MR conditionally safe. For such implants, the previously mentioned warning may not be applicable. Please contact the implant manufacturer for the specific conditional information. The conditions for MR safety are the responsibility of the implant manufacturer, not of Siemens Healthineers.



Open Recon

Open Recon is a developer-friendly interface that facilitates the creation and deployment of innovative MR reconstruction algorithms. Open Recon unlocks the MR system for algorithms to be deployed by scientists, third party companies, and Siemens Healthineers. Different reconstruction algorithms can be executed in a container on the reconstruction system, exchanging data via a dedicated interface. With Open Recon, custom reconstruction algorithms can easily be run and adjusted, enabling seamless workflow. Open Recon also facilitates the sharing of algorithms across institutions relying on the ISMRM raw data format.

Highlights and benefits:

- Simplified reconstruction environment for scientists
- Convenient access to reconstruction parameters via dedicated "inline" card
- Facilitated scientific collaboration via the ISMRM raw-data format
- Possibility of MR reconstruction algorithms deployment for third parties and Siemens Healthineers





Improving the MRI patient experience — with comfort, speed, and entertainment

Most patients who undergo an MRI scan experience some level of anxiety. Help patients overcome anxiety by turning MRI into a comfortable, fast, and entertaining experience.

- Calm patients with a relaxing atmosphere
- Create a patient comfort zone
- Ease patients' anxiety

Bring patient experience solutions to life with augmented reality Explore how our solutions improve the MRI patient experience with augmented reality (AR). Configure the solutions in your environment and display them in life size directly on your smart mobile device.



Calm patients with a relaxing atmosphere1

Patients arriving for an MRI examination are often anxious and stressed. Help them relax the minute they enter the room with our scanner MoodLight. You can also design a calming theme for your scan room using scanner skins, projections, or wall coverings.



Quiet Suite - Imaging is to be seen, not heard

Offer patients quiet examinations of the brain, spine, and large joints —without compromising image quality or scan time. Quiet Suite benefits your patients by providing a 99%² reduction in sound pressure for neurological and orthopedic MRI exams.



MAGNETOM Mini Scanner Mock-up¹

Let patients see, hear, and feel an MRI scan with our MAGNETOM Mini Scanner Mock-up. The MAGNETOM Mini Scanner Mock-up comes with a sliding table top that can be manually moved in and out of the bore. The MAGNETOM Mini Scanner Mock-up also features two buttons that, when pressed, will play pre-recorded sounds of three different MRI sequences.



¹Optional

²Data on file.



MRI Life Design

Short installation time

Thanks to its compact system design, MAGNETOM Sola has a typical installation time of less than 10 working days, helping reduce costs from the very start.



Small footprint

Minimum total space requirement: ~300 ft² for magnet, electronics, and console room. The system complies with the standard ceiling height of 94.5 in. An integrated water cooling cabinet eliminates the need for dedicated cooling of the entire equipment room.



Zero Helium boil-off magnet technology

During operation, the magnet windings must be cooled below their critical temperature using liquid helium. Equipped with Zero Helium boil-off technology, MAGNETOM Sola requires no helium refill in normal use. Depending on the frequency and type of applications used, overall savings of up to 1,300 liters of liquid helium are possible¹.



Product take back

Most of the materials used to produce MAGNETOM Sola are recyclable. 92% (by weight) can be recycled for material content and 8% for energy. We refurbish systems and reuse components and replacement parts whenever possible through our Refurbished Systems business.



Power-saving technology

Intelligent technology for higher energy efficiency: optimized sequences for less gradient switching, and self-adapting components, that switch off automatically when not needed.



System start timer

Timer clock that can be installed together with the MAGNETOM Sola to start the system automatically at user-definable times, eliminating waiting times during system boot up. It allows the definition of three different startup times for different days.³



Advance. Now Evolve

The Advance. Now Evolve when included in a service agreement, elevates your imaging solutions to the head of the pack. Get the latest versions of your equipment's software as it becomes available—as well as systematic hardware upgrades—so your imaging systems remain state-of-the-art for years to come.



¹Data on file

²Source: https://www.bloomberg.com/news/articles/2013-01-31/helium-rises-to-highest-since-1995-in-fallout-from-shale-boom.
³University Hospital Freiburg, Germany. The statements by Siemens Healthineers customers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results. This statement was provided by a person who or whose institution is engaged in a collaboration with Siemens Healthineers.



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Further information is available at www.siemens-healthineers.com.

The outcomes and statements provided by customers of Siemens Healthineers are unique to each customer's setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, and level of service/technology adoption), there can be no guarantee that others will achieve the same results.

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