MAGNETOM Sola

Leading the field

siemens-healthineers.com/sola

SIEMENS Healthineers

With MAGNETOM Sola, you are truly leading the field

MAGNETOM Sola is the perfect symbiosis of power, intelligence, and speed. This is a scanner designed to exceed your expectations and amplify your clinical capabilities.

Built on our most powerful 1.5T platform, MAGNETOM Sola adapts to your needs so that you can rise to the most demanding challenges.

It puts cutting-edge AI at your fingertips to accelerate and enhance your performance.

And with its intelligent assistance, the system guides you through each step of the workflow, while also putting your patients at ease.

Your powerful step into the future

At the core of our revolutionary MRI system lies a magnetic design unparalleled in strength and efficiency, setting new benchmarks in diagnostic imaging.

MAGNETOM Sola raises clinical care to the next level and paves the way for your powerful step into the future.

Ultra-high performance
1.5T magnet
up to 50 cm³ FOV[1]
Excellent homogeneity

Strong gradient's system
XJ gradients[2]: 57 mT/m @ 216 T/m/s
XQ gradients[2]: 78 mT/m @ 346 T/m/s

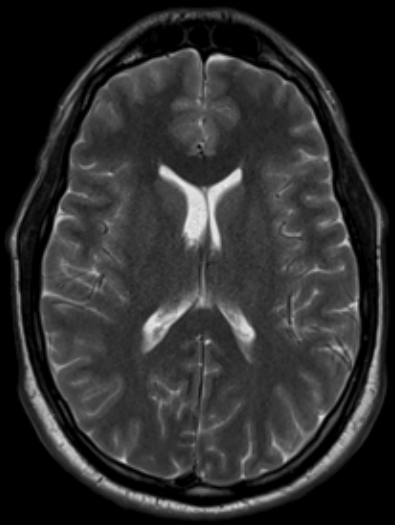
Tim 4G with up to 204 channels[3]
32, 48 or 64 channels in one FOV

Scalable, **high-performance**
coil portfolio

Faster than ever before

Deep Resolve is at the forefront of the deep learning revolution in MRI with Deep Resolve Boost & Sharp. These technologies use deep neural networks in the reconstruction process to achieve faster scans than ever before, while simultaneously increasing image sharpness and resolution. Across multiple clinical applications, Deep Resolve can further be combined with our unique acceleration technologies such as Simultaneous Multi-Slice (SMS) to produce images of superior quality in a fraction of the acquisition time, a true paradigm shift in MR imaging.

Conventional

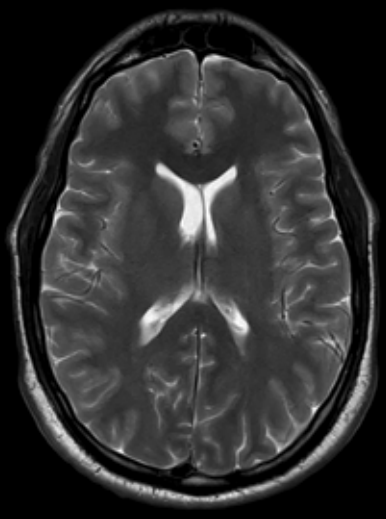


T2 TSE
PAT 2
0.4 x 0.4 x 5.0 mm^3
TA 0:52 min

50%
faster

2x
resolution

Deep Resolve

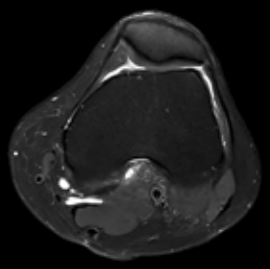


T2 TSE
PAT 4
0.2 x 0.2 x 5.0 mm^3
TA 0:26 min

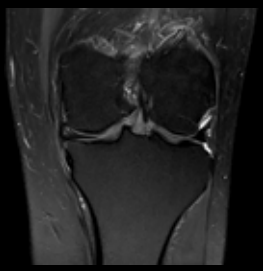
ID1aaaa3996

Learn more about
Deep Resolve

Deep Resolve – excellent image quality and acquisition speed

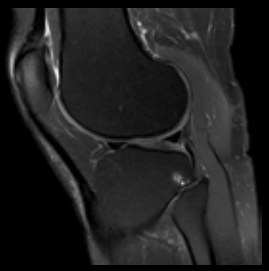


PD TSE fs transversal
PAT 3, SMS 2, Deep Resolve
0.3 x 0.3 x 3 mm²
TA 1:00 min

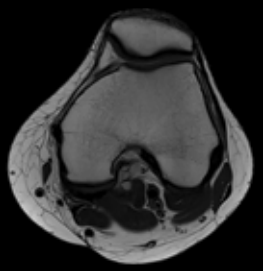


PD TSE fs coronal
PAT 3, SMS 2, Deep Resolve
0.3 x 0.3 x 3 mm2
TA 0:50 min

A complete knee examination in 3 min. scan time



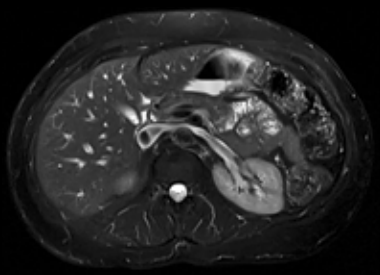
PD TSE fs sagittal
PAT 3, SMS 2, Deep Resolve
0.3 x 0.3 x 3 mm²
TA 0:43 min



PD TSE fs transversal
PAT 3, SMS 2, Deep Resolve
0.3 x 0.3 x 3 mm²
TA 0:36 min

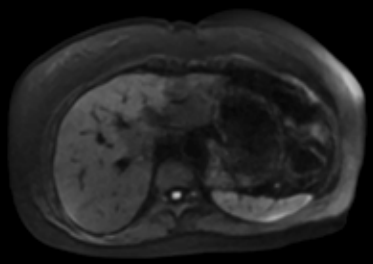
1aaaa4054

→ **Shorter scan times for a more comfortable patient experience**



T2 HASTE fs
Deep Resolve

0.5 x 0.5 x 6.0 mm³
TA 0:22 min
Single breath-hold

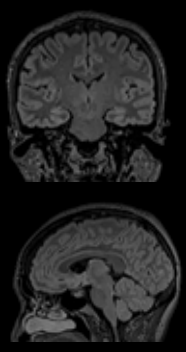


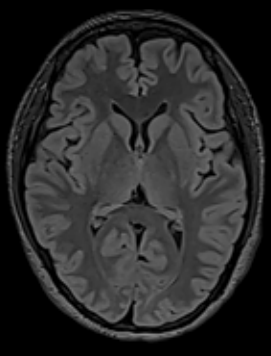
EPI Diffusion, b800
Deep Resolve
PAT 3
1.4 x 1.4 x 6.0 mm³
TA 0:59 min

1aaaa4372

Boost speed and image quality in all dimensions

To unlock a new dimension of speed and clarity in 3D MRI. Planned Deep Resolve for SPACE and VIBE.[4]





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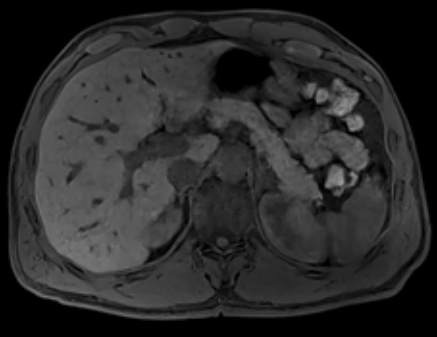
T2 FLAIR SPACE
CAIPI 4, Deep Resolve
0.5 mm iso
TA 3:22 min

Courtesy of Jones Radiology at Calvary Adelaide Hospital, Adelaide Australia



1aaaa4764

VIBE fs
CAIPI 4, Deep Resolve
0.6 mm iso
TA 0:13 min
Single breath-hold

Beyond speed. New clinical possibilities

With our renowned acceleration technologies Compressed Sensing and CAIPIRINHA you experience an enormous reduction in scan time. This opens up new clinical possibilities for 3D imaging and especially when displaying dynamic processes or moving organs.

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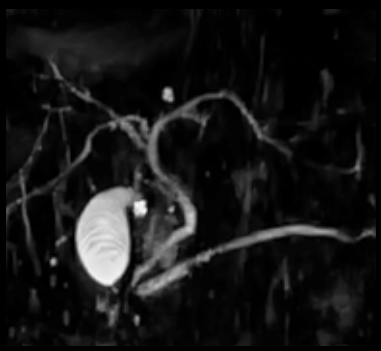
3D TOF Angio
Compressed Sensing 5
0.5 mm iso
TA 2:00 min

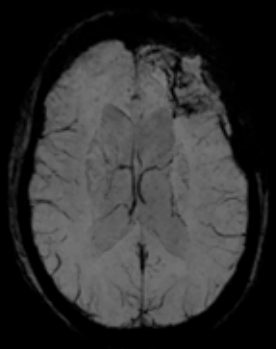
55% faster



1aaaa2793

3D T2 SPACE MRCP
Compressed Sensing 24
0.5 x 0.5 x 1.7 mm^3
TA 0:13 min
Single breath-hold

96% faster



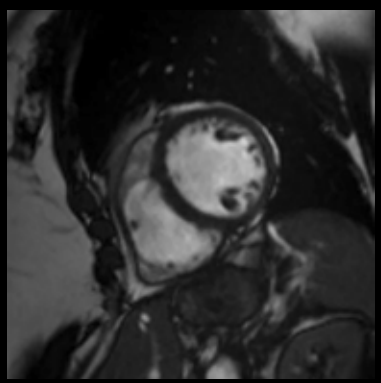
1aaaa4289

3D Wave-CAIPI SWI
CAIPIRINHA 6
0.9 x 0.9 x 2.0 mm^3
TA 1:44 min

53% faster

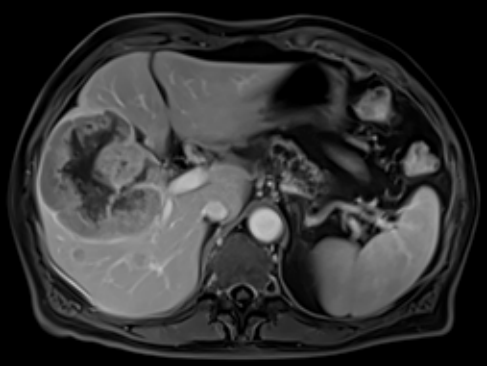
Free-breathing exams

Disruptive imaging technologies, such as Compressed Sensing GRASP VIBE and Compressed Cardiac Cine, allow more patients to benefit from advanced diagnostic capabilities



1aaaa3051

Compressed Sensing Cardiac Cine
0.5 mm iso
TA 2:59 min



1aaaa3309

Compressed Sensing GRASP-VIBE
0.5 mm iso
TA 2:59 min

A workflow built around humans

The MRI workflow revolves around the interaction between the patient, technologist, and the system. We prioritize designing our technologies to optimize this connection for efficiency and comfort.

Discover **BioMatrix Technology**, our cutting-edge MRI technology designed to seamlessly adapt to each patient's unique anatomy and physiology, ensuring customized solutions for optimal outcomes.

Unlock effortless MRI workflows with **myExam Companion**. Its innovative technologies simplify MR operations, and boost efficiency for seamless imaging experiences.

Patient centered experience: Efficiency and comfort in perfect synergy

MAGNETOM Sola offers a holistic environment of solutions that put the patient at ease whilst simplifying the workflow

BioMatrix Sensors

Utilizing our smart and integrated sensors for automatic detection of respiratory and cardiac motion to trigger scans.

BioMatrix Select&Go

Using AI to streamline the patient positioning workflow

New!

Patient registration, positioning, and start scan are now designed to be performed directly at the patient's side[4]

myExam 3D Camera

Captures the patient's shape, position on the table, and height in three dimensions, making patientpositioning up to 48% faster.

A scalable, high-performance coil portfolio allows you to tailor the system to the specific demands of your institution

New!

BioMatrix Contour XL coil[4] with extra-large coverage of 60 cm × 90 cm, including a rotating cable connection and integrated **BioMatrix Sensors**.

BioMatrix Head/Neck coil with 20 channels. Tiltable coil with DirectConnect and integrated **BioMatrix CoilShim**.

Dedicated **MSK coils** such as our TxRx Knee 18 coil provide high-resolution imaging and superior patient comfort.

Intelligent guidance for imaging excellence

MAGNETOM Sola with **myExam Companion** offers assisted scan workflows that enable reliable imaging results. Using the new possibilities of digitalization and AI, data is turned into integrated expertise and tailored assistance.

myExam Assist

Flexible and guided

myExam Assist offers a semi-automated scan workflow that assists the user with smart automation while maintaining full flexibility to tailor the workflow to their needs.

Over 90%[5] of MRI exams are covered by myExam Assist

Offering tailored scan strategies

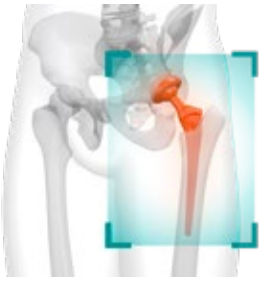
Automated slice alignment using anatomical landmarks enables consistency

Adjustable scan parameters

myExam Implant Suite

Our solution ensures a straightforward setup for implant scanning.

- Seamlessly integrate with the registration process.
- Facilitates simple setting of SAR or B1+rms limits and gradient slew rate per axis for MRI examinations, especially for patients with implants.

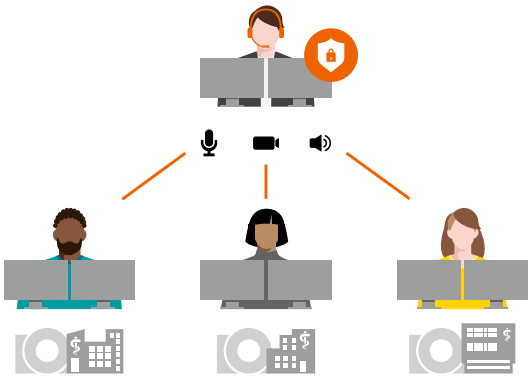


syngo Virtual Cockpit[6]

Move knowledge, not staff!

Support MRI, CT, PET, and SPECT Scans remotely – independent of location!

- Experts can assist with up to 3 scans simultaneously
- Care teams stay connected through chat, audio, and video
- Easy protocol management from virtually anywhere



myExam Autopilot

Automate intelligently

myExam Autopilot offers a fully automated scan workflow including a streamlined user interface for the easiest and quickest MRI exam.

Scan with virtually a simple click of a button

A simplified user interface to keep the focus on what matters

For consistent results – no matter the user, patient, or workload

AI-powered technologies

myExam Assist and myExam Autopilot have AI integrated for consistent image quality

Toward a sustainable future

At Siemens Healthineers we want to work together with you to positively impact not only the well being of your patients but equally ensure that we use our planet's resources responsibly.

We provide technological solutions that reduce the ecological footprint of MRI and contribute to a more sustainable future in healthcare.

Scan the code or visit
siemens-healthineers.com/magnetic-resonance-imaging/sustainability-in-mri
to find out more

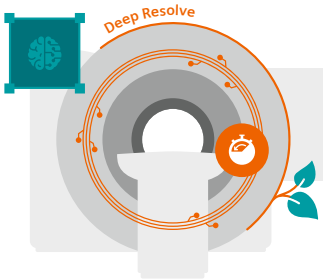
MAGNETOM Sola offers energy saving technologies that holistically apply to daily operations

How MAGNETOM Sola saves energy:

Energy consumption for an MRI system in one year, if the scanner is always on[7]: **~ 100 MWh**

Save ~ 20% energy by turning off your scanner when not in use[8] **~ 80 MWh**

Save ~ 12% energy by using Eco Power Mode[9] **~ 70 MWh**



Save ~ 13% energy by using Deep Resolve[9] **~ 60 MWh**

Did you know?

The start-up time for our scanners is only approx. 5.5 minutes and with our System Start-Up Timer you can enable automatic start-ups of your scanner in the morning. So your system is ready when the workday starts!

Make the most of our innovations and save **~ 40%** energy!

Stay connected to be one step ahead

While you focus on caring for your patients, we take care of your scanner

Our comprehensive services solutions
Individual and everywhere

Guardian Program

Maximize your equipment uptime with our continuous multi-dimensional monitoring 24/7

Our service plans

Enhance your possibilities and stay protected

Hybrid Learning

Flexible educational solutions

Scan the code or visit
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to find out more

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

[1] Depending on the application, the maximum FOV in the z-direction can be up to 500 mm

[2] Maximal gradient performance achieved through vector addition of all three gradient axes simultaneously

[3] Channels (coil elements) that can be connected simultaneously.

[4] The product is still under development and not commercially available. Its future availability cannot be ensured.

[5] Data on file.

[6] syngo Virtual Cockpit is not commercially available in all countries and the service offering cannot be guaranteed due to regulatory or other reasons. In the US, syngo Virtual Cockpit is under FDA's premarket review and conditionally marketed with FDA's guidance. Please contact your local Siemens Healthineers organization for further details. Precondition: Expert-i enabled or KVM switch connected modalities and appropriately trained personnel operating under applicable federal, state, and local laws as to the specific imaging modality(ies), including radiation and contrast. 1 Prerequisites include: Internet connection to clinical network, DICOM compliance, meeting of minimum hardware requirements, and adherence to local data privacy regulations.

[7] Results were achieved by Siemens Healthineers using both standard and optional features. There can be no 'typical' hospital setting (case mix, system type, etc.) and so results by users may vary with no guarantee that the same results can be achieved.

[8] Values are computed for a MAGNETOM Sola XQ system for illustration purposes.

[9] Results are quantified assuming scanning operations as per COCIR standards.

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