

MAGNETOM Sempra

Daily success with 1.5T

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SIEMENS
Healthineers

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Achieving success every day is the result of many small things going well and accumulating to generate the results you need. The new MAGNETOM Sempra system is designed to do just that: deliver consistent high quality, expand your clinical capabilities, and provide financial certainty. Brain, spine, and MSK exams make up an average of 75 percent¹ of routine daily cases. MAGNETOM Sempra is perfectly equipped to deliver reliable consistency especially for these exams, including hard-to-image patient groups. Faster exams with advanced applications, reduced operating costs, and a non-obsolescence service plan ensure low and transparent total cost of ownership.

Contents

Consistent quality, every day with standardized workflows	4
New clinical opportunities, every day with trendsetting 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 Sempra 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 Sempra 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

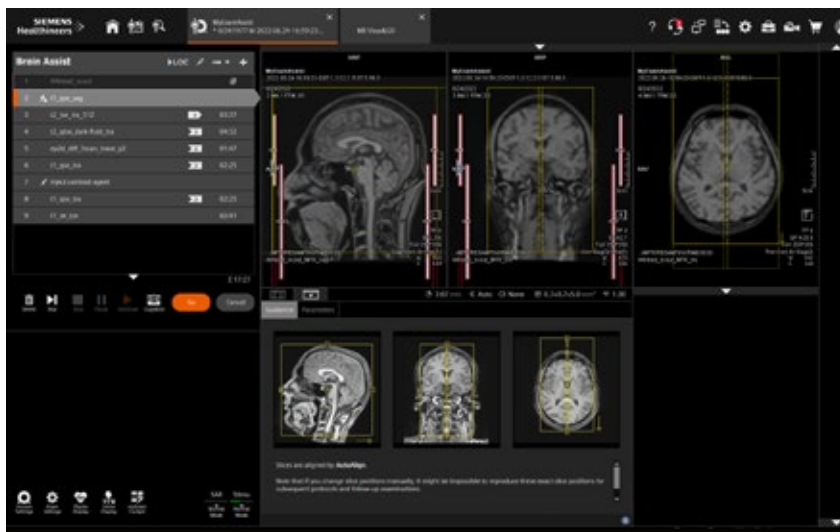
Intuitively customized

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

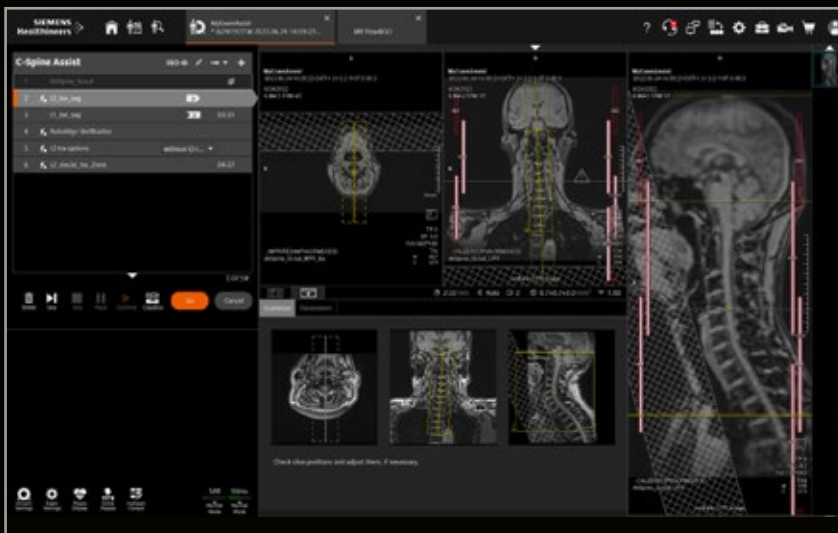
Simplifies staff training

The syngo MR XA 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.

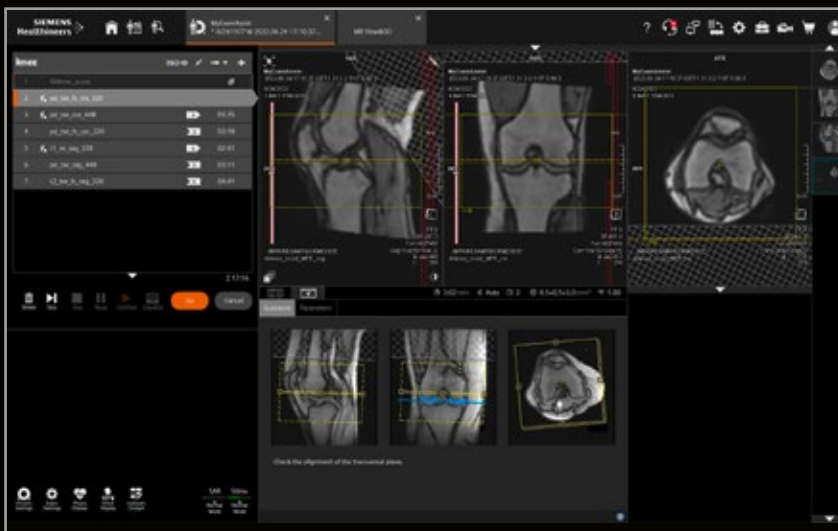


myExam Brain Assist

Consistent quality, every day



myExam Spine Assist



myExam Large Joint Assist

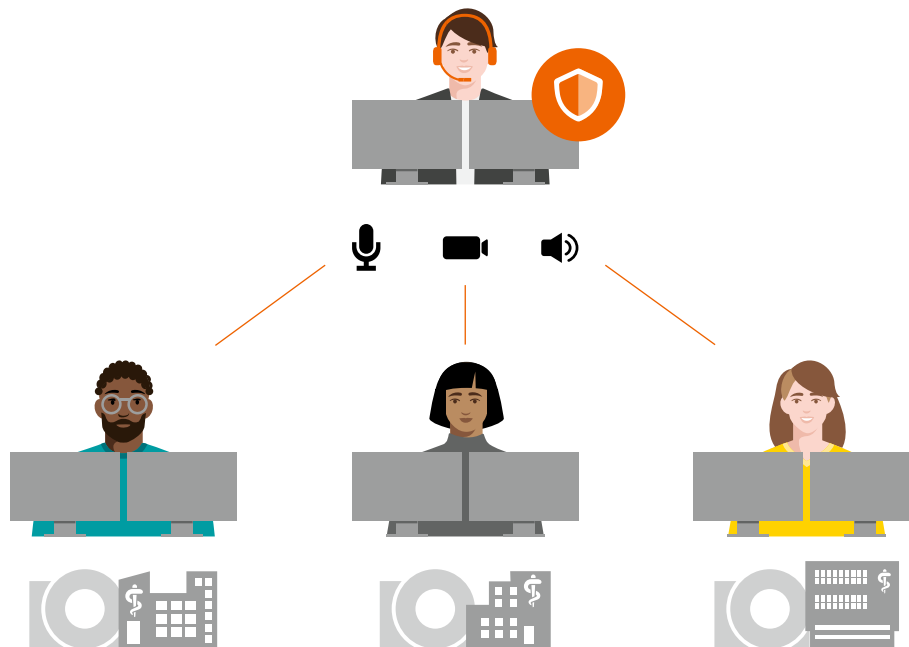


myExam Brain Autopilot

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



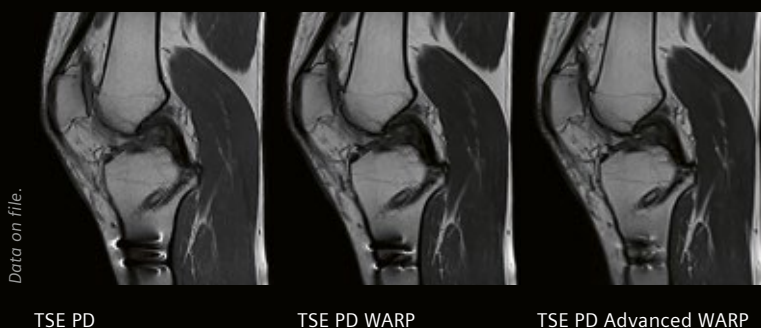
For more information on *syngo* Virtual Cockpit²:
siemens-healthineers.com/syngo-virtual-cockpit

New clinical opportunities, every day with trendsetting applications

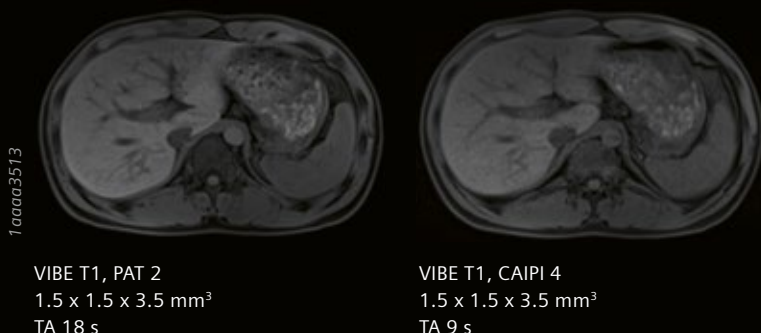
Expand MRI services

Increasing local competition, well-informed patients, and the constant need to attract referrers make it more important than ever to differentiate your services with trendsetting applications. Advanced WARP³, CAIPIRINHA, RESOLVE, and Quiet Suite are just some

of the applications available on MAGNETOM Sempra. They allow technicians to examine patients who are more challenging to scan while providing a positive patient experience and acquiring images at higher diagnostic quality.



Address previously excluded patient groups with MAGNETOM Sempra. For example, Advanced WARP sequences use SEMAC techniques and View Angle Tilting for scanning patients with MR-conditional implants³, including the visualization of anatomical structures adjacent to the implant.



CAIPIRINHA for higher resolution and faster scanning in 3D exams. CAIPIRINHA reduces breath-hold times for 3D VIBE FS and 3D Dixon, which is especially crucial in abdominal imaging. It also allows state-of-the-art breast imaging with improved temporal resolution in dynamic scans while maintaining spatial resolution.

Setting the pace in MR acceleration with Turbo Suite

Turbo Suite for MAGNETOM Sempra is comprised of two packages that include our unique parallel imaging, Simultaneous Multi-Slice⁴, and Compressed Sensing⁴ technologies. And with Turbo Suite, you have access to future developments in MR acceleration so you can stay up to date.



Turbo Suite Essential

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



Turbo Suite Accelerate4

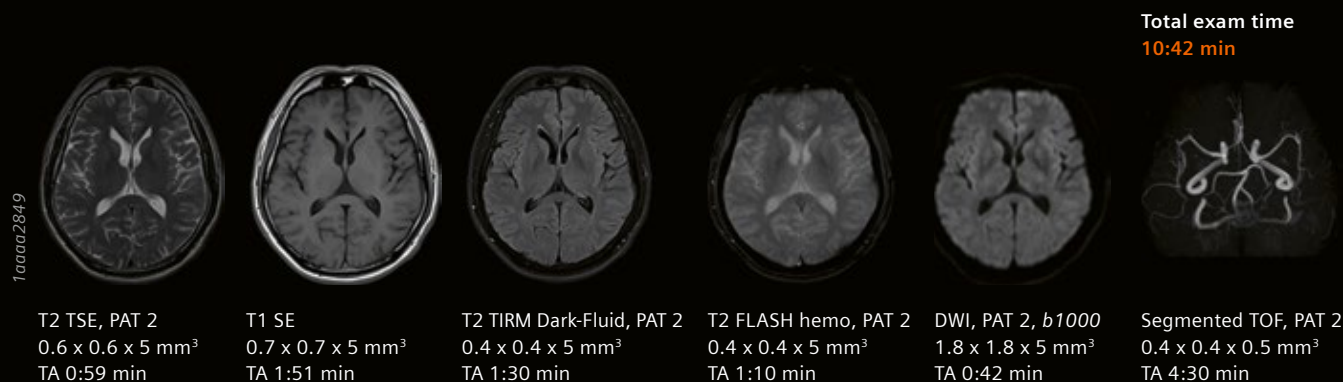
Scan up to 50 percent faster in routine clinical exams

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 Sempra. This package leverages the high-element density coil, the parallel imaging techniques GRAPPA, and our unique CAIPIRINHA to deliver routine exams in 10 to 15 minutes. Isotropic

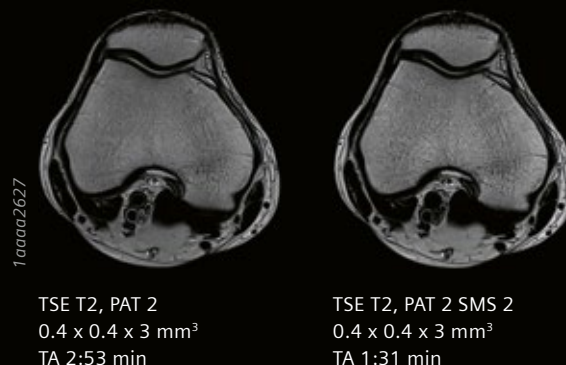
3D MSK exams utilize the power of CAIPIRINHA, delivering all clinically relevant contrasts in around 10 minutes. For body imaging, up to 50 percent⁵ shorter breath-holds and high-resolution scans are possible with CAIPIRINHA.



Turbo Suite Excelerate⁴

Scan up to 50 percent⁵ faster in routine clinical exams

Turbo Suite Excelerate⁴ introduces a paradigm shift in productivity with up to 50 percent⁵ 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 future security with access granted to new planned acceleration techniques, including Simultaneous Multi-Slice RESOLVE, Wave-Caipi, and Compressed Sensing acceleration for SPACE, TOF, and SEMAC.



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.



Conventional

T2 TSE
0.7 x 0.7 x 3 mm³
TA 1:32 min

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 Gain & Sharp

T2 TSE
0.4 x 0.4 x 3 mm³
TA 0:44 min

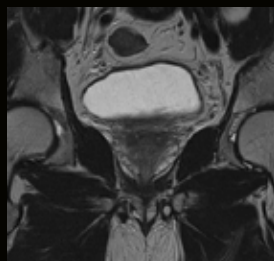
Deep Resolve Boost

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.

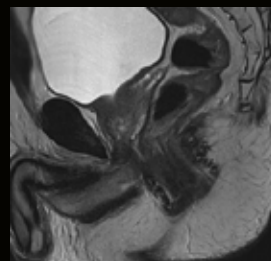


Deep Resolve Boost & Sharp

T2 TSE, PAT 4
0.3 x 0.3 x 3 mm³
TA 1:12 min



T2 TSE, PAT 4
0.3 x 0.3 x 3 mm³
TA 1:20 min



T2 TSE, PAT 4
0.3 x 0.3 x 3 mm³
TA 1:12 min

Streamline your MRI workflow

Optimize and streamline your entire MRI workflow from end-to-end with MAGNETOM Semptra. 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 workflow 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.





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.



View&GO

Dual monitors⁴ 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.



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 Sempra 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 Sempra 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 percent⁵.

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 Sempra offers a wide range of new high-density coils. Powered by Tim 4G, the Body 6 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.





Financial certainty, every day with cost-cutting technologies

Jointly towards a sustainable future

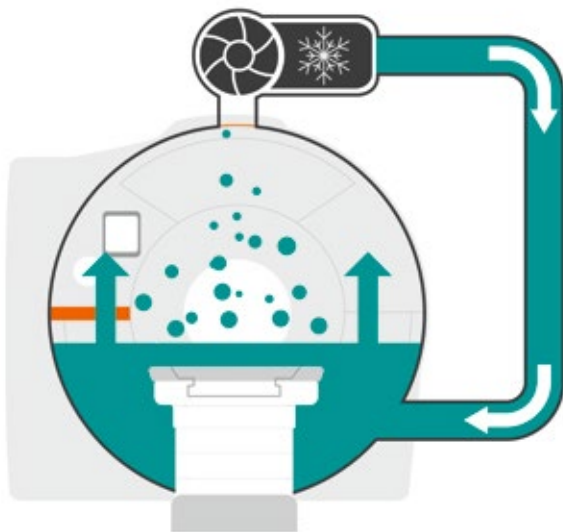
Eco Power Mode

MAGNETOM Sempra incorporates the Eco Power Mode for up to 30 percent⁵ 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 Sempra is easy to site, which enables its use in existing infrastructures and reduces installation costs.



Reduce energy consumption by 30 percent⁵ when system is not in use

International version.

Not for distribution or use in the U.S.

MAGNETOM Sempra 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.

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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.

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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 The MRI restrictions (if any) of the metal implant must be considered prior to the patient undergoing an MRI exam. MR imaging of patients with metallic implants carries specific risks. However, certain implants are approved by the governing regulatory bodies to be MR conditionally safe. For these 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.

⁴ Optional.

⁵ Data on file. Results may vary.

⁶ The product is pending 510(k) clearance, and is not yet commercially available in the United States. Its future availability cannot be guaranteed.

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