



I-class. Extraordinary 3T performance.
Everyday ease. All together.

MAGNETOM Trio

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SIEMENS
medical

Introducing I-class.

Innovative applications. Innovative workflow.

Welcome to the next generation of MRI. Powered by Tim® MAGNETOM Trio™ with I-class makes it easy to use 3T MRI technology every day. Now you can routinely achieve the highest level of image quality. Streamline planning and processing. And diagnose the most challenging diseases quickly and confidently. Welcome to I-class.



Enter the new world of innovative applications.

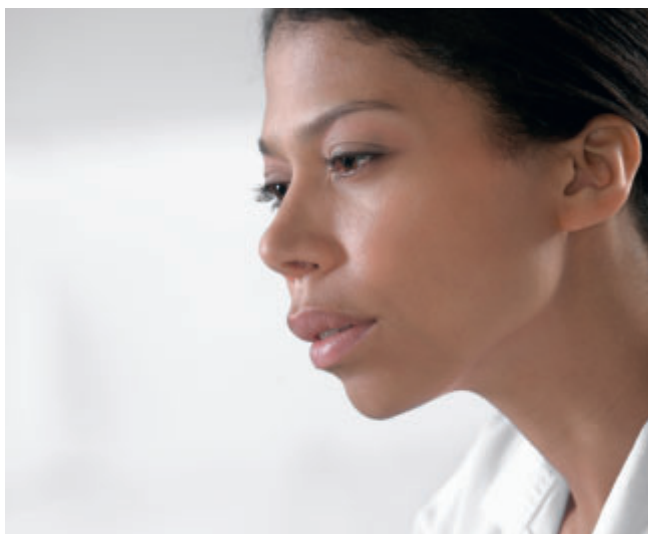
The natural next step in the Tim revolution, I-class combines innovative clinical applications with unprecedented workflow efficiency. Enabling you to see more. And do more.

MAGNETOM Trio with I-class offers a new level of flexibility, accuracy, and speed. With Siemens *syngo*®-based applications that provide pristine image quality for faster recognition of details. Such as imaging of the spine, the thorax or diffusion-weighted imaging in the body.

Enjoy the ease of innovative workflow.

I-class, powered by Tim, redefines "easy" along the entire MRI workflow path. Featuring everything you need for simple planning and processing. While eliminating the need for patient repositioning and manual coil changes.

With the power of Tim, MAGNETOM Trio with I-class provides a solid foundation that will continue to yield innovative new applications. And new opportunities for the future.

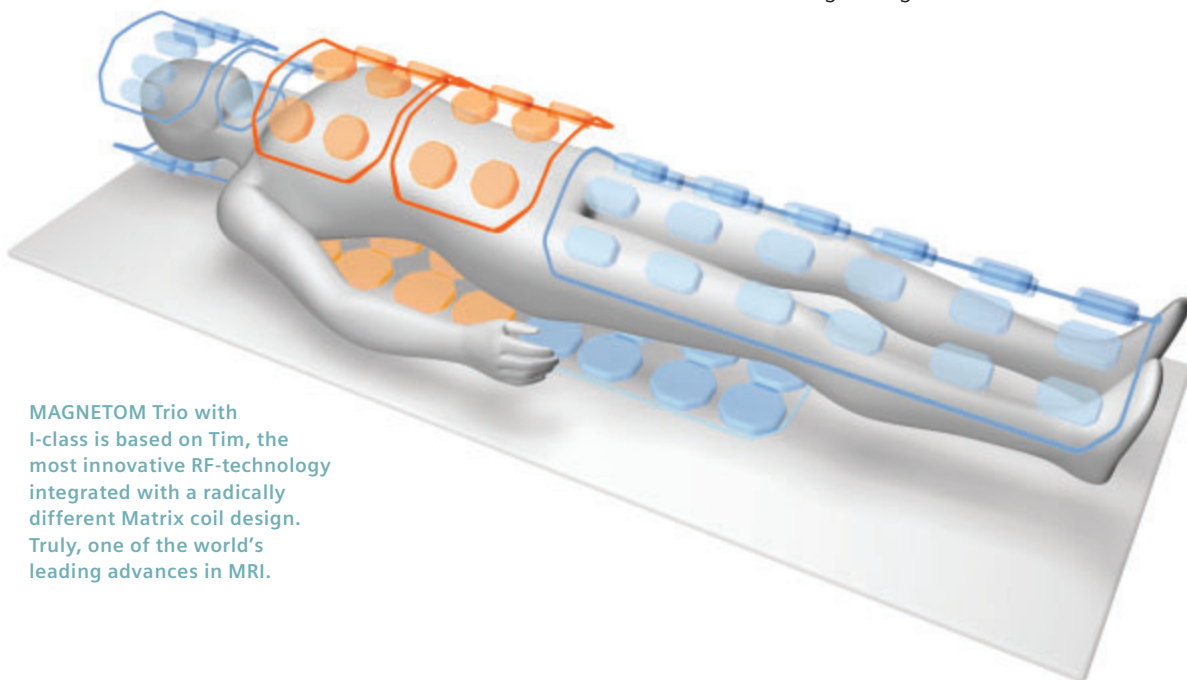


Now 3T is all together routine

MAGNETOM Trio meets I-class.

It's time to think differently about 3T. Meet MAGNETOM Trio with I-class, the only 3T system with the power of Tim (Total imaging matrix technology).

For 3T that works hard and works fast. Tim makes 3T simple to use for all clinical applications and all body parts. Available with up to 102 seamlessly integrated coils and up to 32 RF channels for ultra-fast scan times and high image resolution.



MAGNETOM Trio with I-class is based on Tim, the most innovative RF-technology integrated with a radically different Matrix coil design. Truly, one of the world's leading advances in MRI.



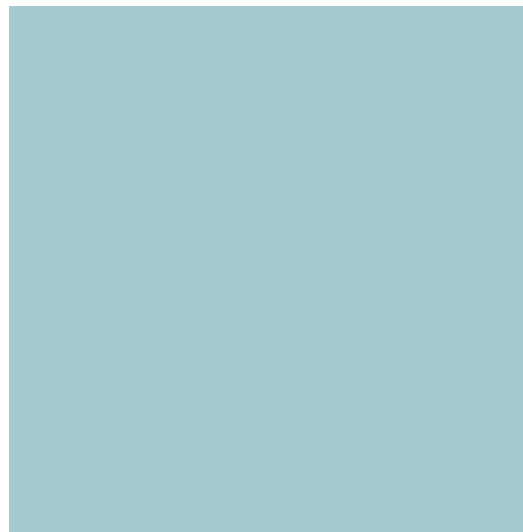
All together revolutionary

Tim. The power behind our most innovative

From the beginning, Tim (Total imaging matrix) changed everything. With a new level of flexibility, accuracy, and speed that enables you to advance both your clinical and workflow capabilities. And now, with Tim enabling innovative new applications, everything is about to change again.

Tim: A revolution in flexibility.
Select exams, not coils.

Configure Tim's lightweight Matrix coils any way you want, tailored to the anatomy or clinical question you are interested in. Tim's Intelligent Coil Control then automatically detects and selects the appropriate coil elements. Pathology doesn't stop at the end of a coil, and now a single click is enough to perform your comprehensive exam.



applications.

Tim: A revolution in accuracy. Local and total.

With up to 100% more SNR provided by Tim's high density Matrix coil elements, you enjoy pinpointed accuracy. Whether you're scanning a single tiny lesion or focusing on multiple organs, joints, the entire central nervous system, or even the whole body.

Tim: A revolution in speed. Parallel in all directions.

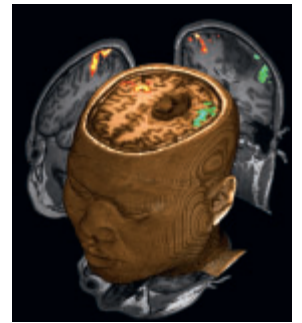
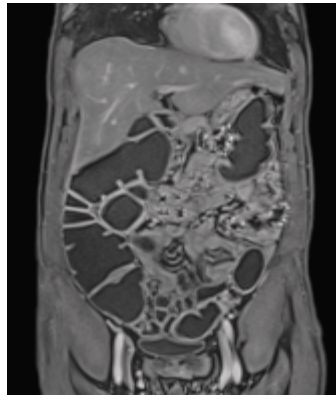
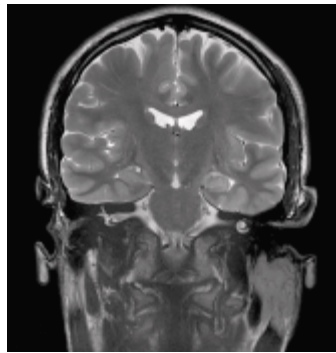
Tim was designed for excellent Parallel Imaging in all directions and from head to toe. Tim gives you the highest acquisition speed without sacrificing spatial or temporal resolution. For 3D exams with double oblique slice orientation. With acceleration factors up to 16, you'll enjoy shorter scan times, shorter exams, and greatly increased patient throughput.

12-channel Head Matrix Coil.

MAGNETOM Trio delivers stunning resolution for imaging deep brain structures in clinically relevant acquisition times, thanks to the industry's leading gradient technology, the 3T Head Matrix Coil, and unique Parallel Imaging with *syngo* GRAPPA.

50 cm FoV.

MAGNETOM Trio with 50 cm FoV allows visualization of all relevant anatomy at once. Because pathology does not stop at the end of the coil.



Functional MRI.

MAGNETOM Trio brings you inline 3D fMRI. Technology leadership for your daily routine. Easy to perform, easier to interpret.

From head to toe.

MAGNETOM Trio is capable of high resolution whole body screening with pristine image quality for up to 181 cm without patient or coil repositioning.

MAGNETOM Trio with I-class offers a unique combination of features for effortless workflow, leading to increased throughput and profitability. Its remarkable speed also means less chance of patient movement during a scan. So while image quality is increased, the need to rescan is significantly reduced.

MAGNETOM Trio with I-class combines one of the best 3T magnet and gradients in the industry with a revolutionary matrix coil design. Enabling clinicians to perform any MRI study – from the most routine to the most challenging – quickly, easily and without compromise.

MAGNETOM Trio with I-class gives you:

- A full 200mT/m/msec slew rate for ultrafast scan times and high image resolution
- Significantly improved workflow by eliminating the need for patient repositioning and manual coil changes
- 32-channel 3T system for accelerations up to PAT 16
- Coverage up to 50 cm FoV
- AudioComfort to reduce acoustic noise by up to 90%*.

MAGNETOM Trio is helping customers from small and medium facilities to leading institutions around the world develop new approaches to clinical care. MAGNETOM Trio with I-class can keep you a step ahead.

* Result may vary. Data on file.



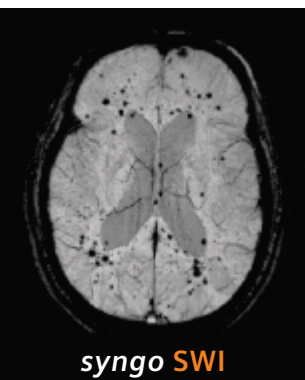
All together the most innovative applications

Innovative applications: Diagnose extremely challenging diseases quickly and with more confidence.

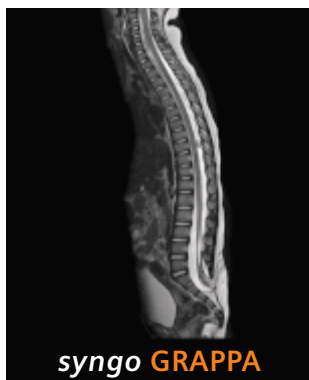
Stroke. Spinal abnormalities. Liver cancer. Disk herniation. Heart disease. Now you can tackle the toughest studies. Evaluate the most complex pathologies. And handle difficult patients with ease. Siemens *syngo* MRI applications help you to do things never before possible.

Fueled by the unmatched power of Tim, our innovative applications are forever changing the way you work. They're the tools you need to do more. Faster. With increased accuracy.

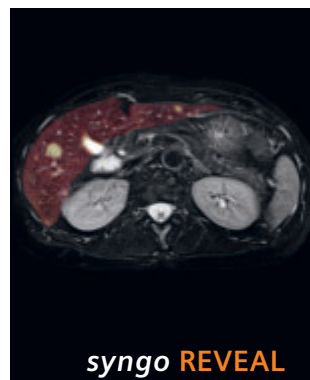
In each clinical field, *syngo* MR applications, powered by Tim, are helping to create the future of MRI.



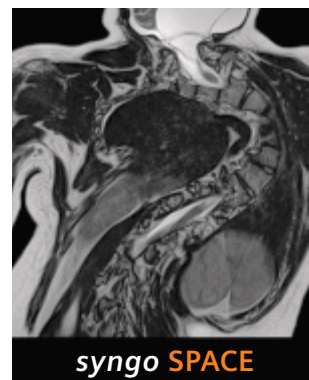
syngo SWI



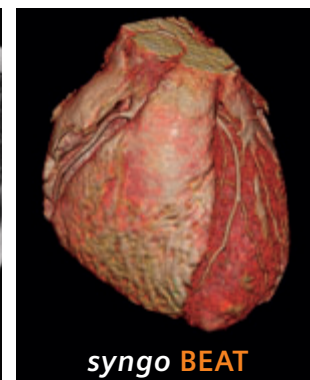
syngo GRAPPA



syngo REVEAL



syngo SPACE



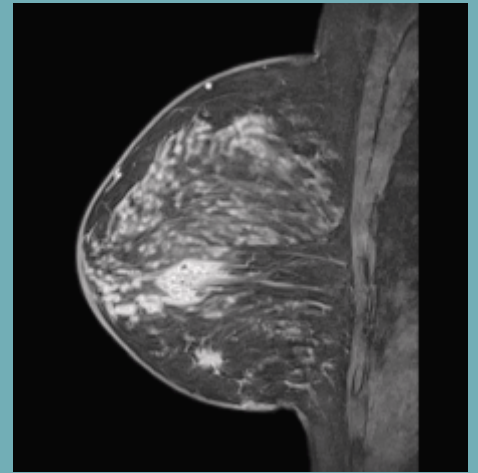
syngo BEAT



3D in all flavors

syngo SPACE

Paradigm shift. 0.3 mm isotropic resolution for the inner ear.



3D breast imaging

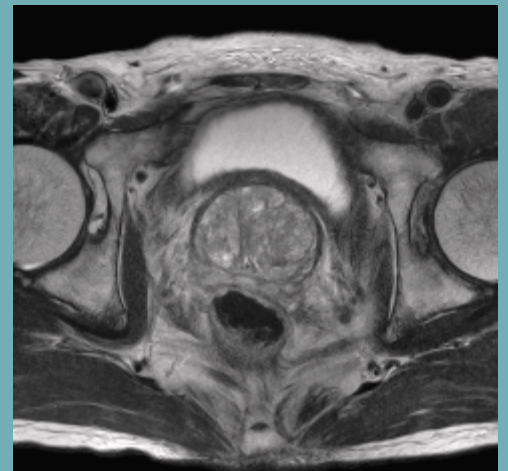
syngo VIEWS

Excellent fat saturation and high isotropic resolution.

Parallel Imaging

syngo GRAPPA

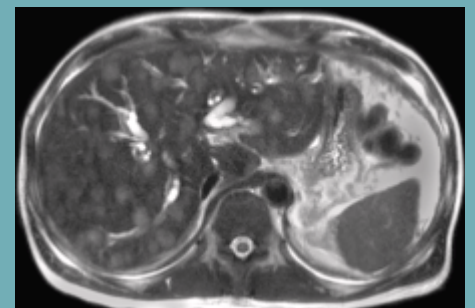
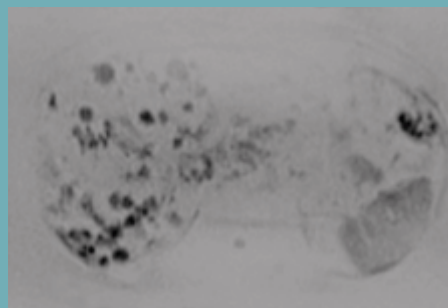
1024 matrix for prostate imaging without an endorectal coil acquired with GRAPPA 2 in five minutes.

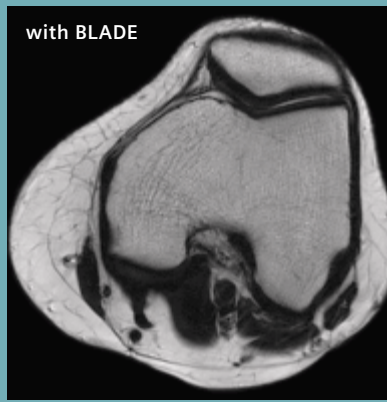


PET-like contrast

syngo REVEAL

REVEAL (below left) with b of 1000 shows full spread of liver metastases difficult to distinguish with HASTE (below right).





Motion insensitive imaging

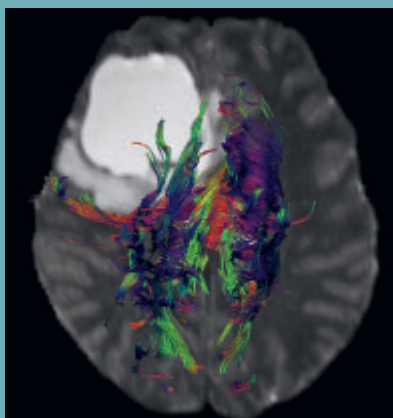
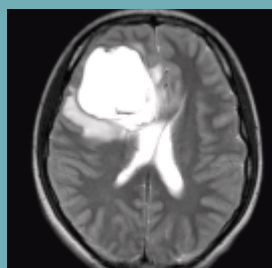
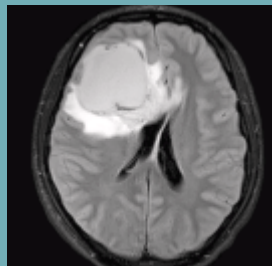
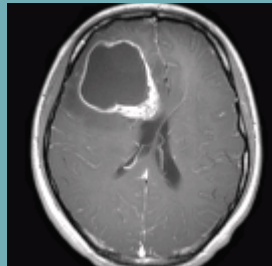
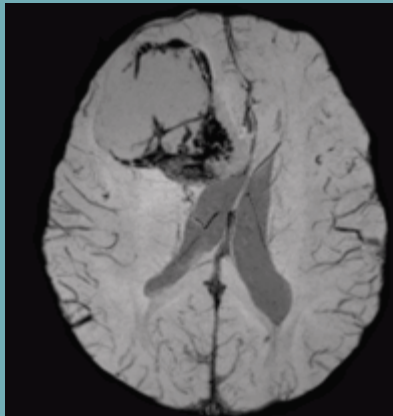
syngo BLADE

For any organ (head, joints, spine, abdomen), for any contrast (T1, T2, Dark Fluid), and for any orientation.

Blood in the brain

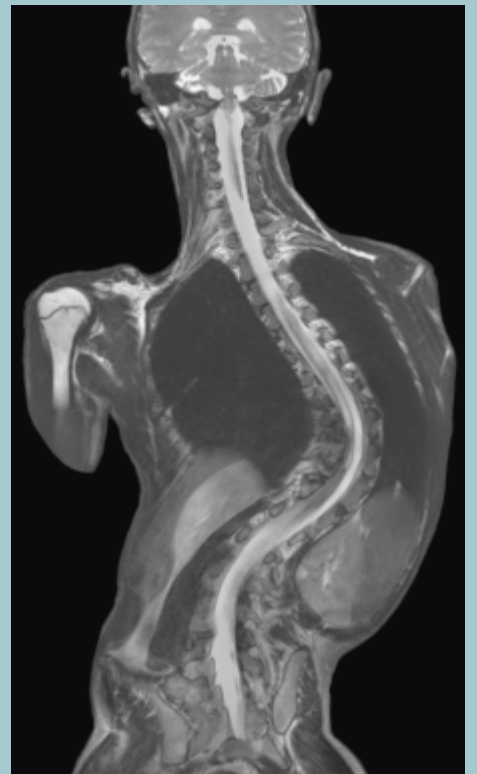
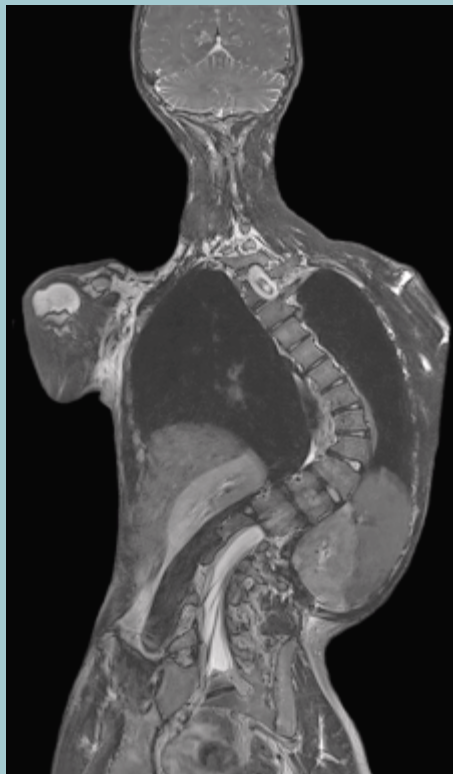
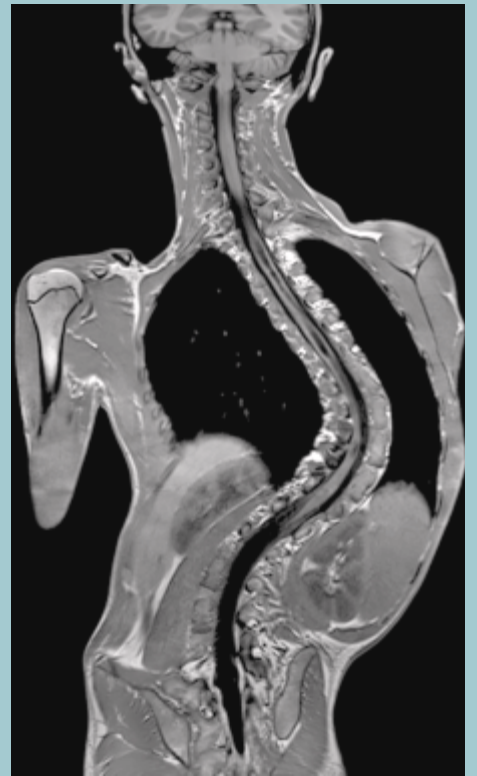
syngo SWI

Increased diagnostic confidence with Susceptibility Weighted Imaging; unique in the visualization of blood products.



MAGNETOM Trio with I-class brings you leading applications.

See what's possible with
MAGNETOM Trio with I-class.
I-class shifts the paradigm
from 2D to 3D imaging over
an extended FoV with Tim.
Breakthrough 3D SPACE and
3D FLASH at 1 mm isotropic
resolution enable curve-cut
MPRs. Enabling you to be
ready for anything.



All together better workflow

Innovative workflow: I-class streamlines MRI exams.

MAGNETOM Trio with I-class supports your workflow in several ways. With breakthrough applications that save scanning and processing time. Reduce unnecessary tasks. Improve accuracy and speed of diagnoses. And forever change the way you work.



syngo, the highly intuitive Siemens cross-modality user interface, is the basis for all MAGNETOM Trio with I-class applications. Enabling you to expand your capabilities in every clinical field – from women's health to functional MRI.

Clinical Applications:

- ***syngo* 2D PACE:** Simplifies body imaging, allowing for multi-breath-hold examinations as well as free breathing during the scans without a respiratory belt.
- ***syngo* BLADE:** Provides robust imaging in neurological, orthopedic and abdominal procedures, correcting for motion artifacts in all body regions.
- ***syngo* SPACE:** Acquires high-resolution 3D images at incredible speeds with contrasts that were not possible before.
- ***syngo* SWI (Susceptibility Weighted Imaging):** Reveals blood products and venous structures with great clarity in minutes.
- ***syngo* REVEAL:** Body Diffusion Imaging for breast, spine, pelvis, or abdomen with free-breathing (2D PACE).



- **syngo TWIST:** Enables high-speed acquisition of 4D MR Angiography (MRA) data sets, obtaining arterial and venous phases in one scan. Provides brilliant images of all body regions, e.g., carotids, pulmonary and other peripheral vessels. Moreover, TWIST does not require any bolus timing. Just inject and go.
- **syngo DTI Tractography:** Allows the visualization of multiple white matter tracts based on diffusion tensor imaging data. Optimized to support pre-surgical planning and to allow for neuro physiological research.

Workflow Innovations:

- **syngo Inline Technology:** Allows you to perform certain processing steps as early as during image reconstruction and display them immediately after completion. That means processing instead of post-processing. Subtraction images, Maximum Intensity Projection, etc., is completion of the scan.
- **syngo Phoenix and PhoenixZIP:** Enable simple exchange of MR protocols, quickly retrieving the entire protocol information in one easy drag-and-drop step. This allows reproducible follow-up examinations.

- **syngo AutoAlign solutions:** Allows reproducible slice positioning in the head and the spine. No manual adjustments. Maximizes standardization and comparability in follow-up examinations.
- **syngo Expert-i:** Gives physicians and experts the ability to remotely access the MRI suite from virtually anywhere within your network, making it possible to address difficult clinical questions while a patient is being scanned.
- **syngo Map IT:** Allows the assessment of T1, T2 and T2* properties of tissues in many body regions e.g., the early detection of osteo arthritic pathology.



AutoCoil Select for dynamic, automatic or interactive selection of the coil elements within the Field of View.

A Siemens Magnetom Trio MRI scanner, a Tim System, is shown from a side-front perspective. The machine has a large, curved, light green upper section and a white lower section with horizontal grey stripes. The word "SIEMENS" is visible on the green section. The text "I-class" is on the white section. The model name "MAGNETOM Trio" and "A Tim System" are also visible. Three orange circles are placed on the image: one at the top left, one on the right side, and one at the bottom center. Three text blocks are overlaid on the image, each pointing to a specific feature with an orange circle.

We see a way to do whole body 3D imaging in six minutes.*

A new level

I-class

We see a way to perform 3D abdominal imaging

We see a way to avoid manual coil changes.*

of excellence. All together.

= Innovation.

g with sub-millimeter resolution in 15 seconds.*



Proven Outcomes.

Proven Outcomes. This is what Siemens is helping deliver right now. Outcomes that result from truly efficient workflow. Outcomes that improve your bottom line. Outcomes that lead to a level of care that feels exceptional to the patient and the care provider. Proof positive of the value of integrating medical technology, IT, management consulting, and services. In a way that only Siemens can.

*Results may vary. Data on file.



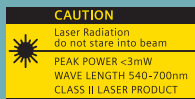
Tim leads the way.

Customers around the world have discovered the power of Tim. A revolutionary technology, it has ushered in the next generation of MRI advances. In flexibility, accuracy, and speed.

Tim is also the key building block for MRI going forward. With power and potential that's still untapped, Tim continues to catalyze new applications to help physicians diagnose even more complex diseases and enables greater-than-ever workflow efficiency.

Ultimately, it's all about excellence. In clinical diagnosis. Streamlined workflow. Greater patient comfort. And business outcomes. It's what we're committed to. Today and tomorrow.





Acknowledgement:

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Philadelphia, USA
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Sun Yat-Sen Hospital, Guangzhou, China

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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syngo Evolve Package: In the event that upgrades require FDA approval, Siemens cannot predict whether or when the FDA will issue its approval. Therefore, if regulatory clearance is obtained and is applicable to this package, it will be made available according to the terms of this offer.

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