

**SIEMENS**



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# MAGNETOM Spectra

It's the key to 3T.

Answers for life.

# MAGNETOM Spectra – It's the key to 3T.

A system that offers unprecedented access to 3 Tesla magnetic resonance imaging? The answer is MAGNETOM Spectra\*. It's the key to a new scope of image and healthcare quality for patients. It's the key to a new level of usability and diagnostic confidence for physicians. And, it's the key to ensure premium patient care at an attractive total cost of ownership for radiologists.

If access is what you are looking for,  
then MAGNETOM Spectra is your key to 3T.





# MAGNETOM Spectra – It's quality. Unchallenged.







# Proof points for quality

- Siemens 3T image quality
- Tim 4G RF technology with DirectRF
  - Higher accuracy, resolution and signal to noise
  - 24 receive channels for up to 120 coil elements\*
  - High density coil arrays, head-to-toe
- Best-in class 3T image homogeneity with TimTX TrueForm
- Maximum range of clinical applications
- Outstanding image consistency and high reproducibility with Dot



MAGNETOM Spectra delivers on all aspects of the renowned Siemens imaging quality – a level of quality that is a byword for premium all over the world. Siemens 3T image quality is a class of its own in Magnetic Resonance Imaging (MRI). MAGNETOM Spectra makes 3T imaging accessible for daily use. Enabled by Tim (Total imaging matrix) 4G and TimTX TrueForm, the system offers an outstanding signal to noise ratio and excellent image homogeneity, which enhance your diagnostic confidence.

MAGNETOM Spectra delivers crisp, high-resolution images that will inspire you with a level of accuracy and detail unprecedented in this particular product range. Advanced image quality is made available for local as well as for whole-body applications by a scan range of up to 205 cm\*.

Furthermore, Siemens leading applications are available from head to toe, including the unique Dot (Day optimizing throughput) engines, which provide excellent guidance and assistance. In consequence, it helps to increase your confidence to a maximum by providing the right answer for every clinical situation. The results are of excellent consistency and easily reproducible, offering the same expert results for every patient. This high level of confidence and comfort together with Siemens 3T image quality facilitates also high trust from referrals.

The renowned quality of Siemens is not only true for the system itself, but it extends to high quality of service as well. It is available all around the world with fast response times and ensures that your MAGNETOM Spectra is always in best shape to constantly deliver great results for you and your patients.

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3 Tesla is part of the future. It contributes a lot to the health care of patients.

Everybody knows that 3 Tesla machines have a very, very high quality and generate beautiful, high resolution images.

Some physicians even ask me to please use a 3 Tesla machine because even physicians can recognize the difference in 3 Tesla image quality.

*Prof. Dr. Kaori Togashi,  
Kyoto, Japan, on 3 Tesla*



# MAGNETOM Spectra – It's usability. Unlimited.









# Proof points for usability

- Dot engines – easy and guided
  - One click exam strategy selection to adapt your scan planning to different patient conditions
  - Automatic positioning with AutoFoV for a consistent and fast set up
  - Synchronized timing of scanning and breathing with AutoVoice Commands
- Tim 4G coil technology
  - Highly flexible and scalable to the anatomy of the patient
  - Ultra light weight coils are easy to carry and position
  - Easy coil connection with the Siemens unique SlideConnect and DirectConnect™
- Easy and comfortable patient setup with the patient-table-integrated 24-element spine coil



Every scanning situation is different. More integrated applications widen the scope of a Magnetic Resonance system, but at the same time functionality is becoming more complex. To increase scanning results to a higher possible level, regardless of a patient's condition, as well as to maximize user confidence, you need an intelligent usability concept. This is a key strength of MAGNETOM Spectra. The system was designed from top to bottom to provide a lasting solution for daily usability needs.

The fourth-generation Siemens coil technology, Tim 4G, provides increased examination flexibility tailored to patient-specific needs. The positioning of the ultra-lightweight coils is fast and uncomplicated. Numerous coil combinations are possible and the Siemens unique SlideConnect and

DirectConnect functionality enables fast and easy patient setup. The time it takes to position patients can therefore be considerably reduced and repositioning becomes unnecessary – which makes a difference for both staff and patients in the end.

MAGNETOM Spectra runs Dot (Day optimizing throughput) engines – the toolset that allows you to personalize and streamline your examinations in a smart way, and tailor your workflow. Due to its guiding concept, even novice users can obtain the best possible results for virtually any type of patient. Dot simplifies MR scanning for various clinical indications and body regions and even minimizes post-processing efforts. Dot engines are an essential part of the latest standard in Siemens usability concepts.

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Our goal is reproducible, high quality images from any type of patient.

3T of course has the advantage of its better image quality. With that image quality we will come to better patient confidence and better clinical results.

And it will force us to use it more and more.

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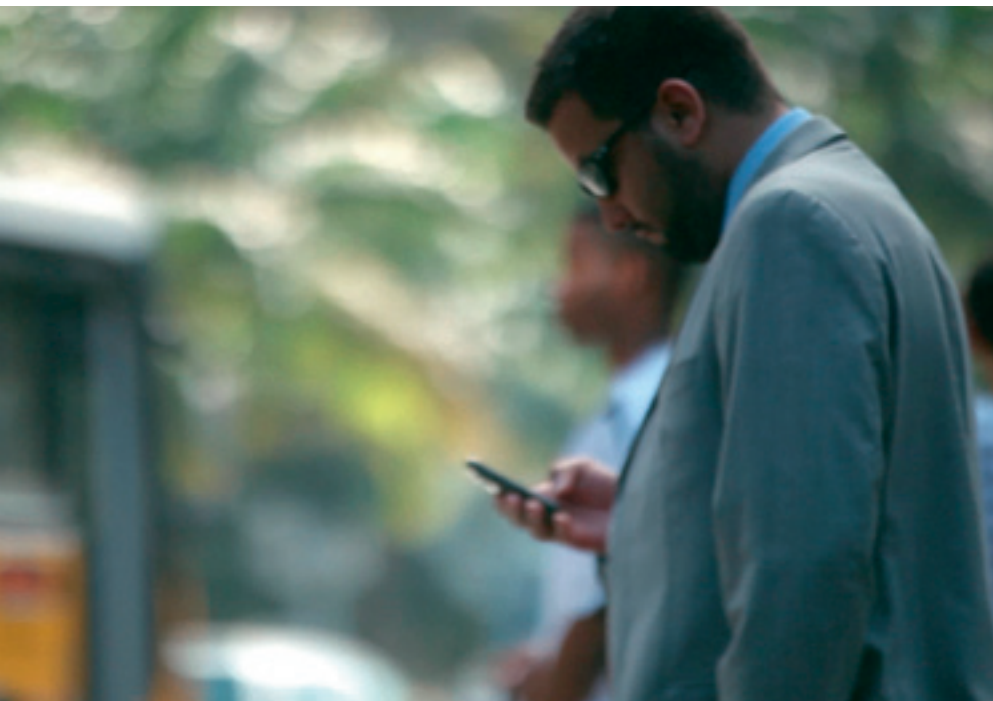
*Dr. med. Serhan Atilla,  
Istanbul, Turkey, on 3 Tesla*





# MAGNETOM Spectra – It's patient care. Uncompromised.







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# Proof points for patient care

- Access to premium patient care with cutting-edge 3T technology
- Easy and streamlined workflow with Dot
- Fast scans enabled by Tim4G
- Maximum system uptime due to our world-class service strategy, providing undisturbed examination workflow
- One user interface and one common reading solution for all modalities with *syngo* and *syngo.via*
- Fast break even due to optimum TCO (Total cost of ownership)
- Low operating cost through multiple measures like the optimized cooling system and state-of-the-art zero helium boil-off technology
- Low installation cost through small footprint and fast installation





Providing a high level of patient care in magnetic resonance imaging is closely connected to increasing access to premium diagnostic technology for patients all over the world. MAGNETOM Spectra's attractive total cost of ownership enables this kind of access to 3T for patients and clinicians alike. The system's attractive cost position is a first in this Siemens performance and quality range. It offers you a whole new perspective on future investments. It offers patients a whole new perspective on healthcare and access to a broad range of clinical applications.

There is a business side to providing high-level patient care. And we handle this business side responsibly – always keeping the output for the patient in mind. Thanks to the excellent price-performance ratio, a fast break even of your investment capital is a given. Quite a lot of thought has gone into lowering peripheral costs as well. Installation and operating costs are kept to a minimum by factors such as fast installation and an Eco Chiller option. What really makes MAGNETOM Spectra

a sound investment is that we have made no compromises in system quality when enabling this TCO. A high standard in software applications and coils, intelligent usability concepts and streamlined workflows with integrated Dot engines, predefined processes that enable automated scanning – all the features are there. Just at a highly sensible price.

Siemens has followed the very important global trend when designing this product – creating sustainable value for the future. The high image quality of MAGNETOM Spectra will have a positive effect on referrals, constantly creating more value for you and your patients. With its latest technology platform, MAGNETOM Spectra offers you an excellent long-term perspective on the business side of imaging that was not available in this price range before. Find out how healthcare business needs can easily be combined with brilliant imaging in magnetic resonance. And find out how this benefits the most important factor in healthcare – clinical outputs for the patient.

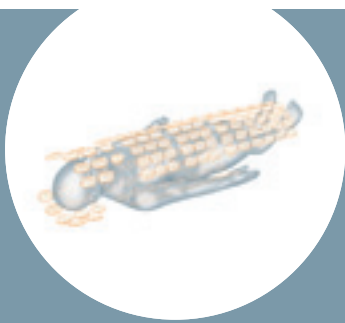
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You have to balance between technology and quality and economical sustainability.

3 Tesla is part of the future.  
If you have a very good radiologist,  
he will ask for 3T. For sure!

Especially if they want to do the tough cases  
because you have better spatial resolution  
and you have better temporal resolution.

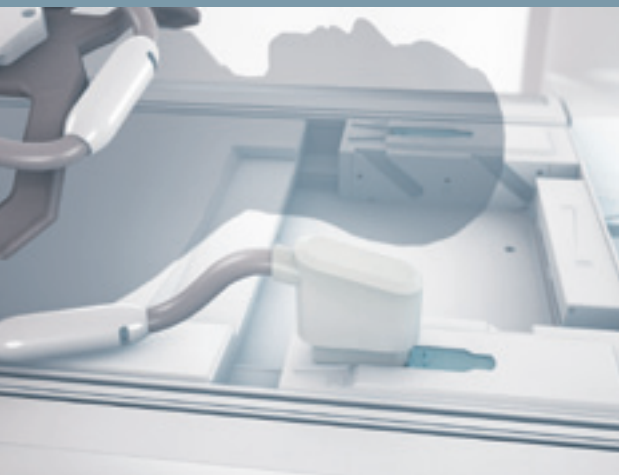
*Dr. med. Romeu Domingues,  
Rio de Janeiro, Brazil, on 3 Tesla*



## Product highlights and features – Tim 4G

Tim 4G is Siemens' latest RF technology that unlocks a new level of imaging accuracy and flexibility.

- Up to 120 elements\* in combination with true 24 RF channels
- DirectRF™ – Tim's all new digital-in/digital-out design for true signal purity
- DirectConnect – cableless coils allow a very easy and fast handling
- SlideConnect – robust and reliable coil connections deliver comfortable plug-and-play feeling
- AutoPosition – accurate iso-center positioning without laser marker\*\* at the push of a button
- Unlimited flexibility – multiple combinations with ultra-light and flexible Tim 4G coils possible



## Excellent workflow and image quality for all anatomies – with the most advanced coil portfolio in its class

### Spine 24

- Integrated into the patient table for easy and comfortable positioning
- Easy, fast and automated whole-spine imaging
- High-element coverage of the complete spine for excellent, high-quality imaging performance
- Multiple combinations with anterior coils for high flexibility

### Head/Neck 16

- Excellent SNR and iPAT in all directions
- Patient friendly design with large opening
- Double-oblique mirror for a comfortable view
- Easy scanning without anterior part for claustrophobic patients

### Further coils available on MAGNETOM Spectra

- Extremity 18
- Shoulder 16 (small & large)
- Hand/Wrist 16
- Foot/Ankle 16
- Peripheral Angio 36
- Special purpose 4
- 4-Channel BI Breast Coil
- 16-Channel AI Breast Coil
- Sentinelle Vanguard for Siemens
- Endorectal

### Body 6

- Ultra-light, flexible design for high patient comfort
- High SNR and iPAT compatible in all directions
- Easy combination with further Body 6 or Flex large 4
- Operates in an integrated fashion with the Spine 24

### Flex small/large 4

- Wrap-around, flexible and ultra-light coil design
- Flexible positioning and very versatile use, e.g. small for elbow or wrist, large for shoulder, knee or hip
- iPAT compatible







## Dot is personalized –

## Dot is guided –

## Dot is automated –

Intelligent, automated workflows, like AutoPosition, AutoFoV, AutoVoiceCommands enable a new level of efficiency.

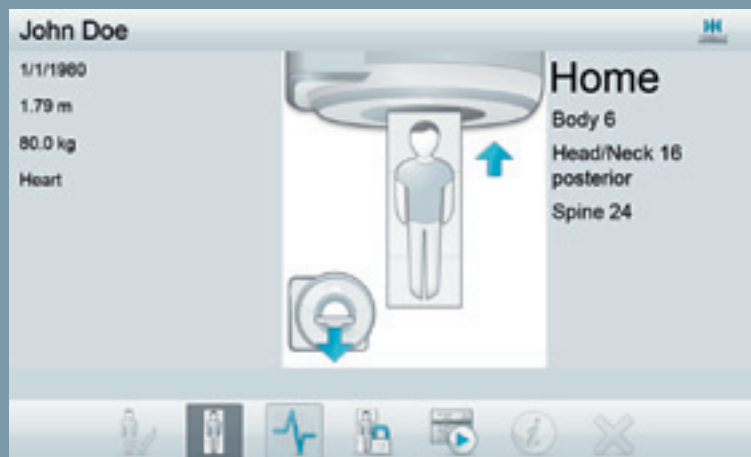


## Dot Control Center – the intuitive patient setup control

- Control wheel for variable patient table speed in any direction
- Automatic transfer to isocenter or home position
- Control of in-bore ventilation and in bore lighting
- Headphone and in-room loudspeaker volume adjustment

## Dot Display – the information center directly at the scanner

- Personal welcome of the patient
- Patient preparation information, like actual physiological curves, coil combination and patient table position
- Unique guidance, e.g. explanation of ECG lead positioning



# Access to brilliant 3T imaging

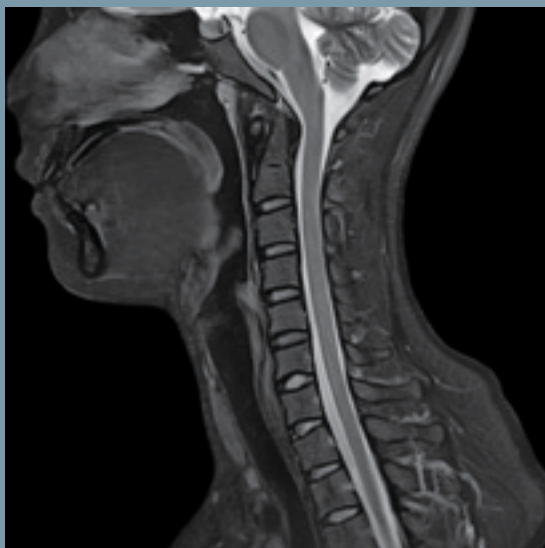
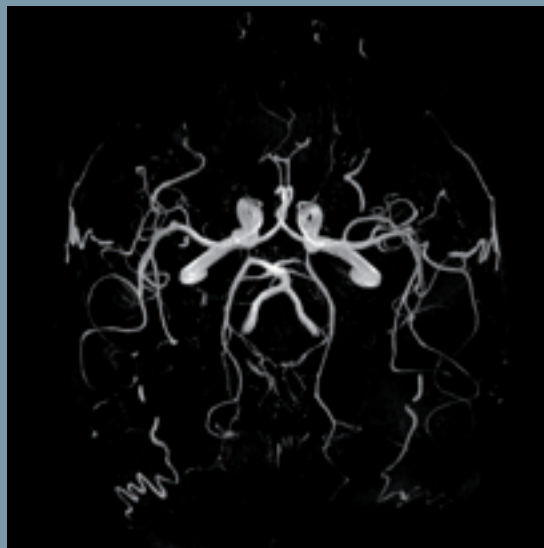
High image resolution, short scan times, no compromises in usability and a maximum application range for day-to-day imaging – MAGNETOM Spectra gives you access to all of the above.

Unchallenged image quality – in 2D or 3D, for any application. MAGNETOM Spectra provides you maximum confidence in your diagnosis.

Excellent resolution in 2D and 3D



Providing outstanding diagnostic confidence



Brilliant 3T image quality and homogeneity in any body region



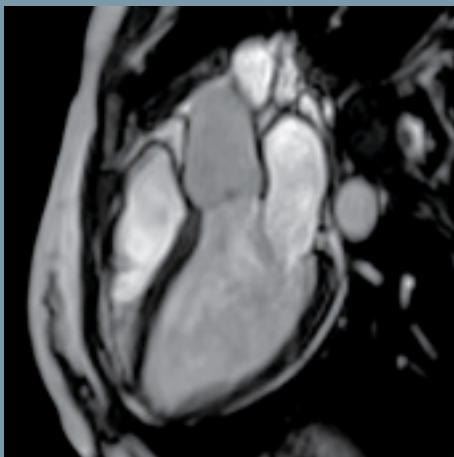
High level of detail and excellent SNR



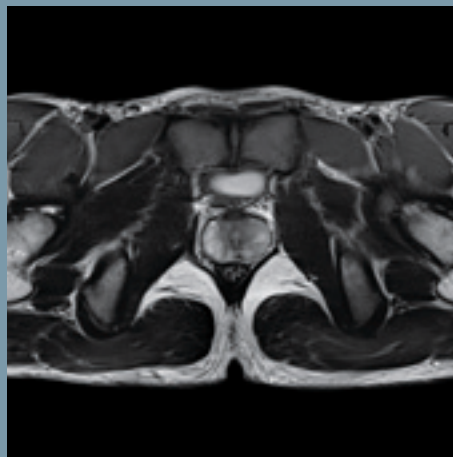
Tim: Answering clinical questions from local up to whole body evaluation

Unlimited usability – fast and easy scan setup, embedded in a guided, streamlined workflow. This results in reliability and reproducibility in any body region with high application standards.

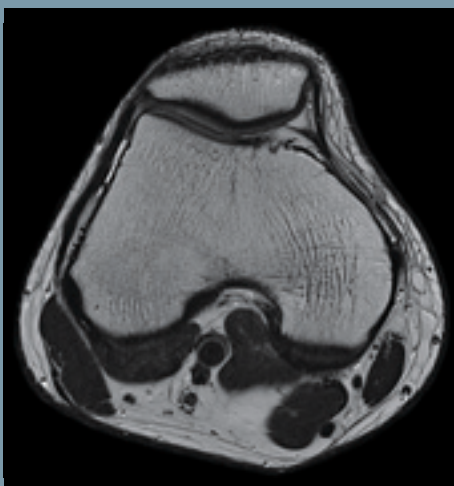
Dot: Guided, fast & easy scan setup for reproducibility



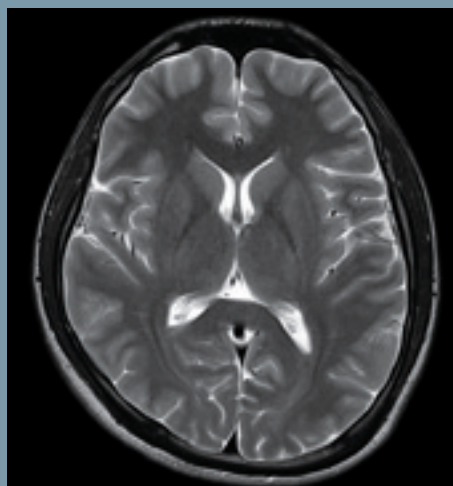
*syngo*: Applications supporting robust and reliable imaging – motion correction with *syngo* BLADE



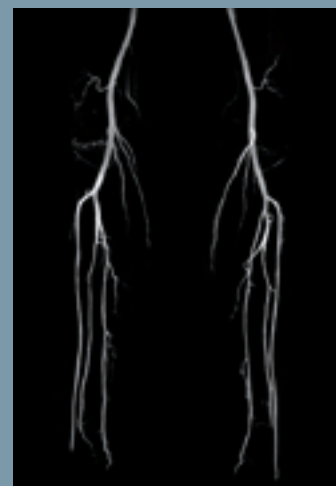
Uncompromised patient care – access to new advanced applications to answer any clinical question, efficient and reliable operation in your demanding day-to-day routine and high-quality clinical results convincing your referrals – this is MAGNETOM Spectra.



High-resolution imaging – in any dimension



1:00 min whole-brain imaging



Access to new applications like non-CE MR angiography with *syngo* NATIVE



# It's the key to 3T

Unprecedented access to a new level of diagnostics. A clear focus on the demanding day-to-day clinical imaging requirements without compromises in image quality. A system design fitting both the latest standard in medicine and today's reality regarding budget. With MAGNETOM Spectra, Siemens is introducing yet another innovation. With this system we are closing the gap between brilliant 3T imaging and cost sensitivity.

MAGNETOM Spectra combines outstanding 3T image quality and typical Siemens product quality. Pure usability and maximum flexibility for the complete range of applications come together in a system with an unprecedented price-performance ratio. A characteristic focus on practicality as well as its unbeatable business-attractiveness is what differentiates MAGNETOM Spectra.



It's your door opener to the  
3 Tesla-community.

It's the key to Siemens 3T quality.

And that will make all the difference.  
For you and for your patients.



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