

**TOSHIBA  
MEDICAL**



## *Vantage Galan 3T*

Peacefully quiet.  
Remarkably fast.

*Vantage Galan 3T*

**TOSHIBA**





Excellent image quality  
Streamlined workflow  
Outstanding patient comfort

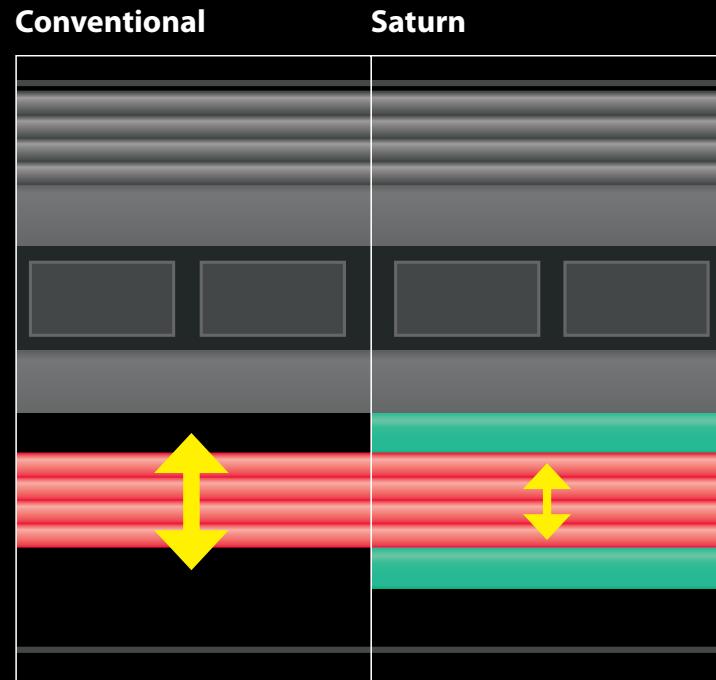
Toshiba Medical's Vantage Galan™ 3T offers a transformational experience for you and your patients in MR.

By prioritizing the patient experience, image quality and clinical workflow, Vantage Galan 3T is designed to surpass your expectations – all delivered in a small and quiet MR.

# Excellent image quality for every clinical application

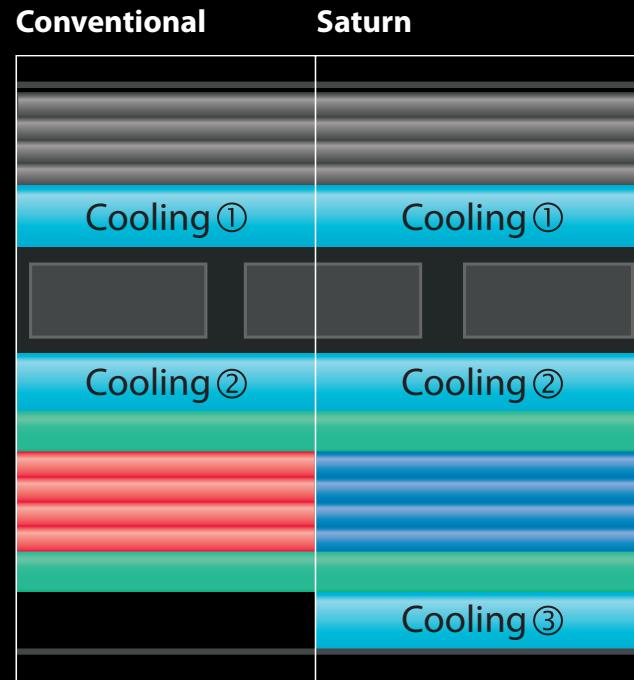
Toshiba Medical's intelligent Saturn gradient technology provides a more consistent image quality through increased gradient stability and precise center frequency control.

## Gradient coil – cross-section view



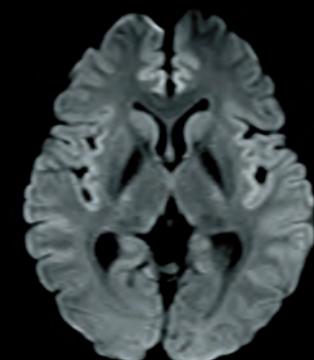
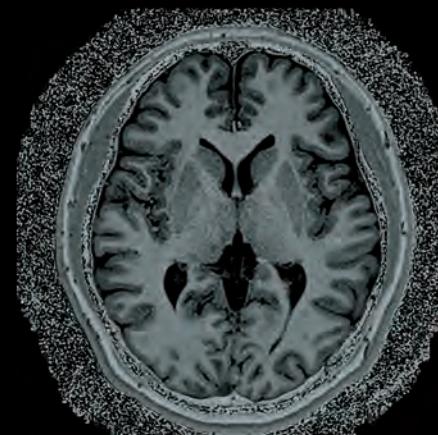
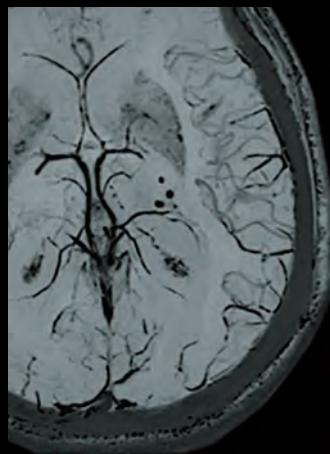
### Increased gradient stability

With less vibration comes more stability, resulting in crisper images. Saturn technology delivers this through hardening the gradient coil with high-pressure molding. The result is less signal blur and thus better image resolution.



### Precise center frequency control

In Vantage Galan 3T, increased image sharpness is achieved through improved thermal stability and thus a more stable center frequency. Triple cooling layers suppress temperature increases under high load leading to more stable image quality over long scan sessions.



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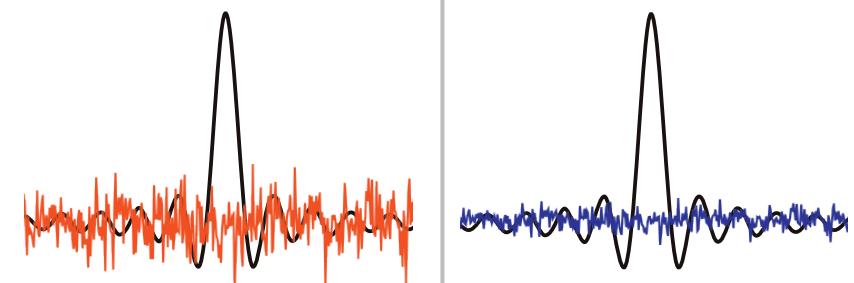
PURERF  
TECHNOLOGY

20 %  
INCREASE  
IN SNR

PURERF Rx

PURERF Rx OFF

PURERF Rx ON



Adaptive noise cancellation

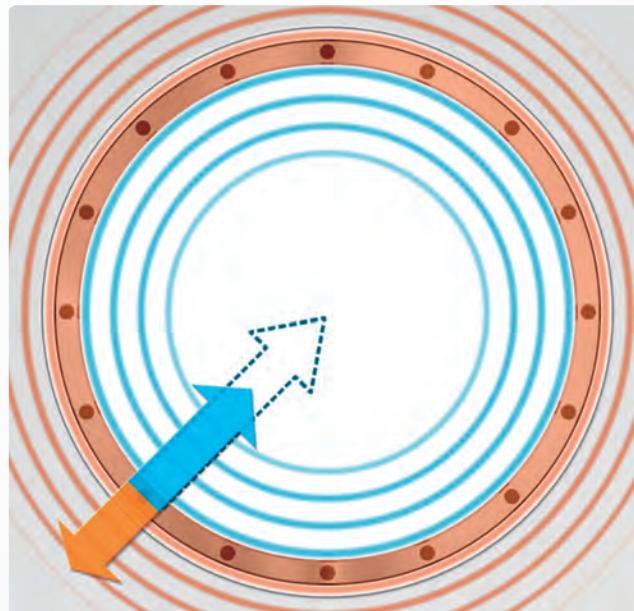
PURERF Rx technology employs a proprietary algorithm and reduces noise at the source. The result is an increase in SNR and improved image quality.

# Innovative technology for sharper images

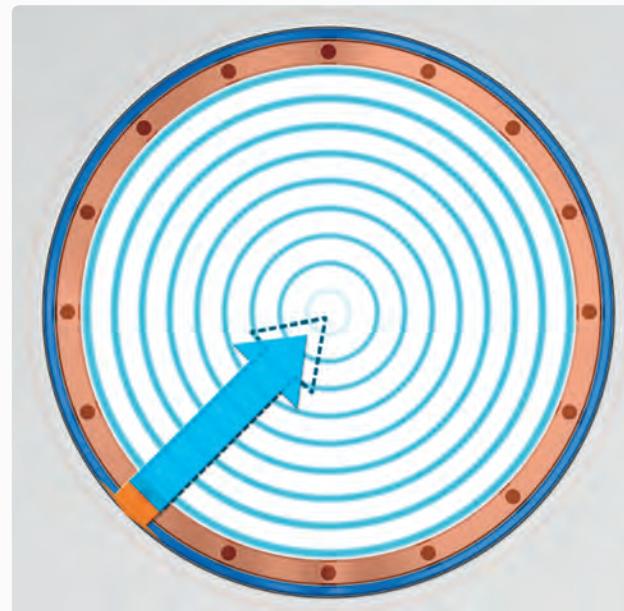
Toshiba Medical's unique <sup>PURE</sup>RF technology increases the signal-to-noise ratio (SNR) of Vantage Galan 3T by up to 20 percent for all clinical applications. The system's improved RF transmit and receive efficiency helps raise your diagnostic confidence while shortening scan times.

## <sup>PURE</sup>RF Tx

### Conventional



### <sup>PURE</sup>RF technology



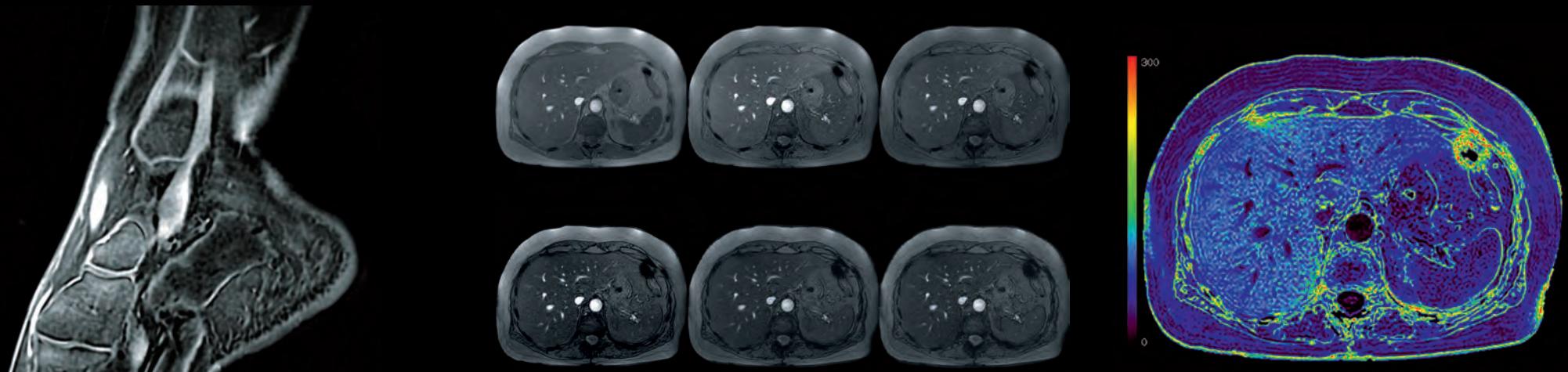
■ Ideal RF transmission ■ Actual RF transmission ■ Transmission loss

### Advanced shielding design

Toshiba Medical's unique <sup>PURE</sup>RF Tx technology allows you to acquire sharper images with improved SNR. Toshiba Medical's novel shielding design is aimed at maximizing the efficiency of RF transmission.

# A richer set of images

Toshiba Medical's industry-leading non-contrast techniques allow for vascular imaging from head to toe, expanding patient access to MR angiography and dramatically improving patient safety. Multi-phase transmission technology provides outstanding homogeneity across all anatomical regions and clinical targets.



## Seeing the unseen with UTE sequences

Extend the range of imaging to tissues traditionally difficult to capture in MRI. Ultrashort Time Echo (UTE) allows for imaging of tissues such as ligaments, tendons and lung tissue.

## Multi-echo imaging in one breath hold

Six echoes can be acquired within one breath hold allowing for quantitative information while maintaining SNR and spatial resolution.



### Capturing hemodynamics with mUTE\* 4D MRA, 3 phase

Vantage Galan 3T's UTE sequences allow for less dephasing and more homogeneous vessel signals. At the same time, the multiple TI (4D) generates dynamic images visualizing the blood flow without the need for contrast agents.

\* minimized acoustic noise utilizing UTE

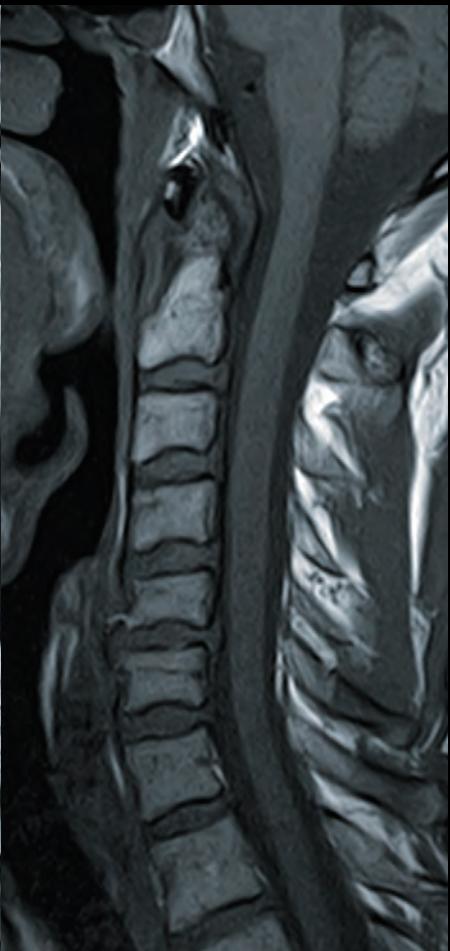
### Contrast in your images, not in your patients

The risks associated with gadolinium-based contrast agents has driven the need for alternative techniques. Our unique non-contrast MRA sequences minimize risk while producing exceptional images.

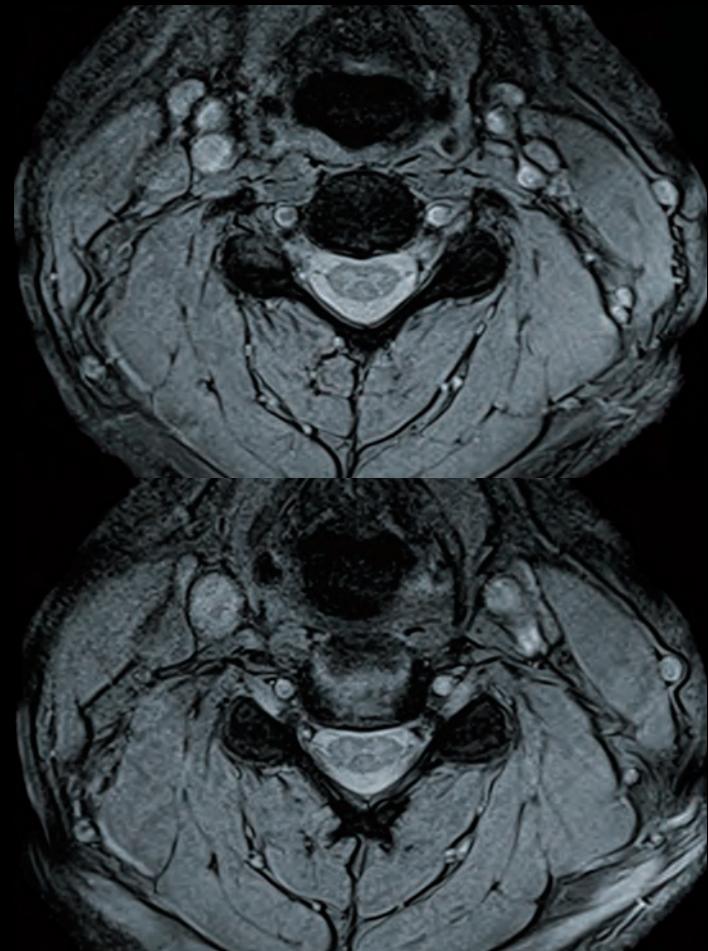
# C-Spine Routine



Sag T2



Sag T1



Ax FE 3D mEcho

# L-Spine



Sag T1



Sag T2

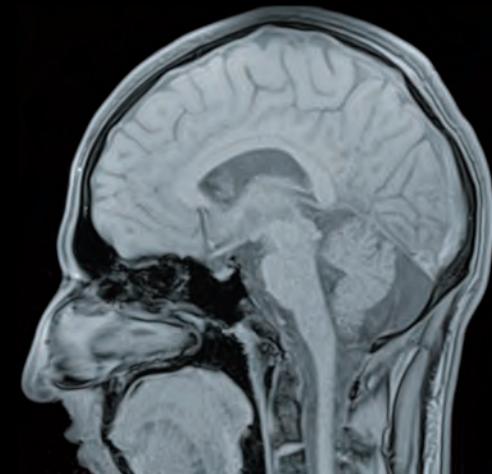


Ax T1

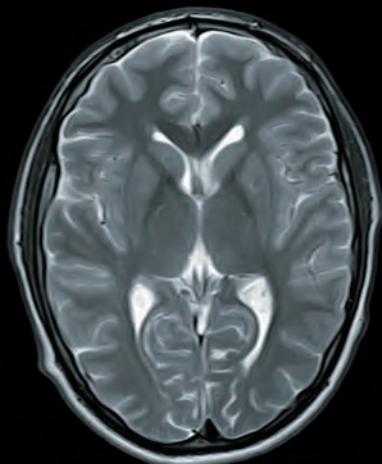


Ax T2

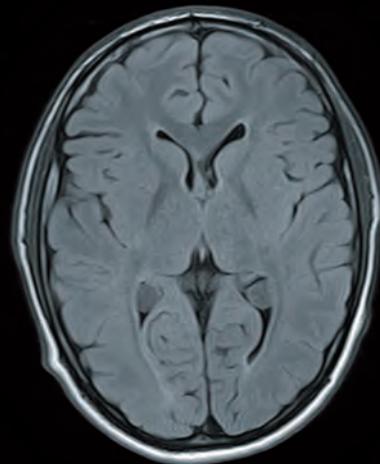
# Brain 5 minute exam



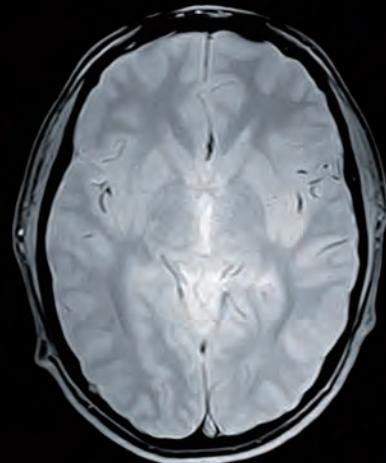
Sag T1



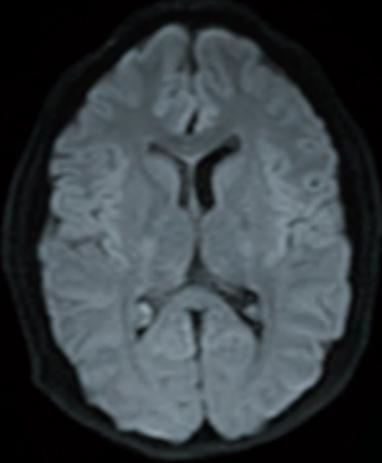
Ax T2



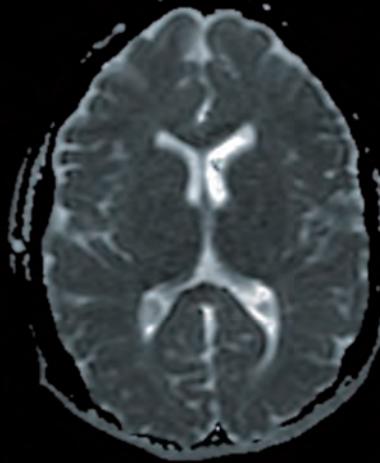
Ax FLAIR



Ax T2\*



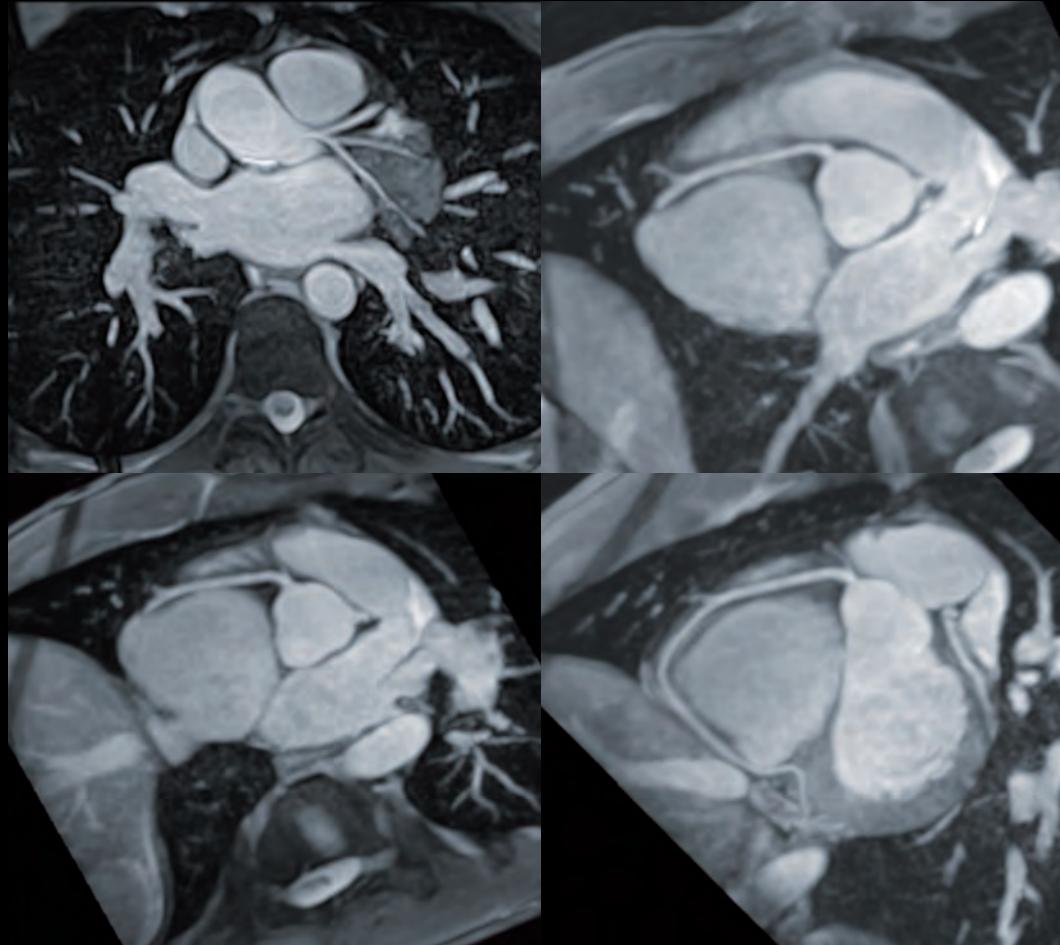
Ax DWI



Ax ADC

Sequence	FOV	Resolution	Scan Time
Sag T1	26 x 26	0.5 x 0.5	0:30
Ax T2	23 x 23	0.3 x 0.3	0:43
Ax FLAIR	23 x 23	0.4 x 0.4	1:06
Ax T2*	23 x 23	0.4 x 0.4	0:47
Diffusion	23 x 23	0.7 x 0.7	1:16
			4:22

# Non-contrast MRCA



Non-contrast MRCA MIP post-processing

# Knee



Ax PD FS



Sag PD



Sag T2 FS



Cor PD



Cor PDFS

# Ankle UTE



PD



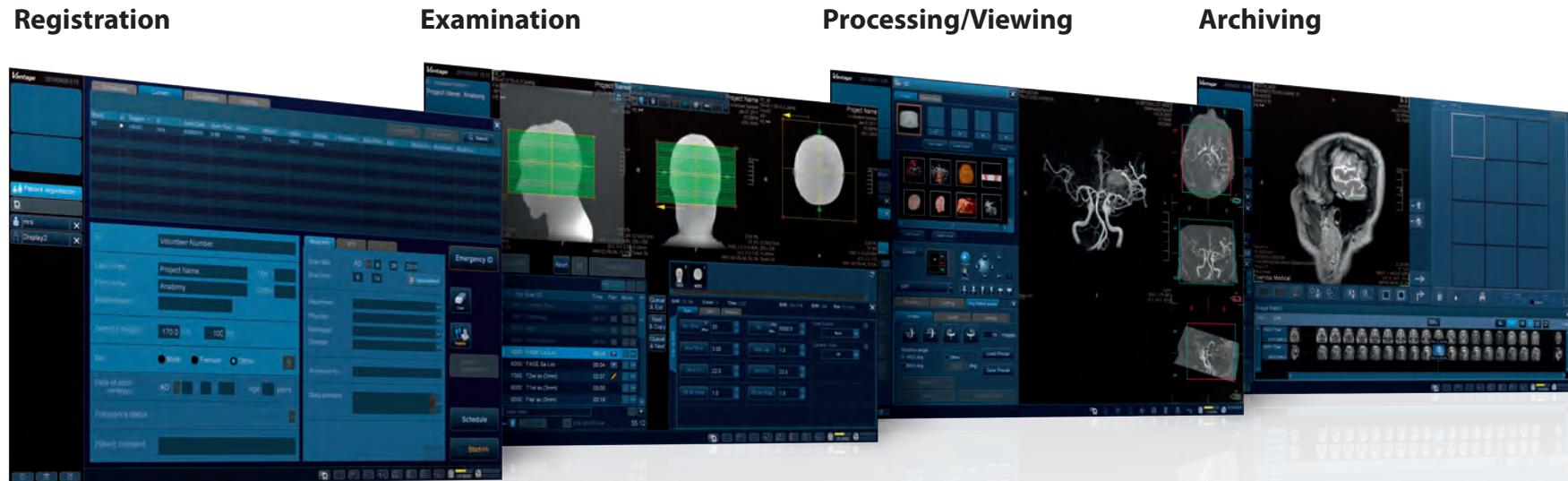
PDFS



UTE

# Streamlined workflow in an efficient workspace

M-Power™ makes Toshiba Medical's sophisticated suite of MR software remarkably easy to learn and use, enabling technologists of every skill level to access its full range of functionality. M-Power allows you to accommodate a higher patient volume while offering a wider range of clinical applications.



## The ultimate, intuitive MR interface

Toshiba Medical's intuitive M-Power user interface takes MR performance and flexibility to an unprecedented level. M-Power can be customized to your site-specific requirements to increase efficiency all the way from patient registration to reporting and archiving the clinical results.



## Advanced post-processing as easy as 1-2-3

Advanced post-processing functions such as fMRI, spectroscopy, diffusion or tensor tractography can be accessed directly on the main console using a simple, three-step process. These optional applications can be added as your clinical practice grows.

**128  
CHANNELS**



Atlas Head/Neck  
16 elements

Atlas Body  
16 elements

Atlas Body  
16 elements

Atlas Body  
16 elements

Atlas Spine  
40 elements

#### Integrated workflow solution

Atlas SPEEDER™ coils are uniquely designed to improve workflow and patient comfort. Vantage Galan 3T easily handles multiple studies by allowing you to position the patient and utilize the coils you need in one easy step.

# Atlas SPEEDER technology empowers the technologist

Compared to conventional coils, Atlas SPEEDER coil technology utilizes a unique combination of smaller elements, which deliver a higher SNR, and larger elements which provide greater penetration. By simultaneously integrating up to 128 channels, Vantage Galan 3T provides better image quality throughout the entire imaging volume.



Wrist Median Nerve  
(3D FE mEcho)

## Positioning flexibility

- Multiple coils can be used simultaneously, creating flexibility for operators and comfort for patients
- Convenient port locations mean that a large segment of exams can be performed feet first
- 205 cm of table movement coupled with a sliding spine coil provides maximum flexibility for operators and greater comfort for patients



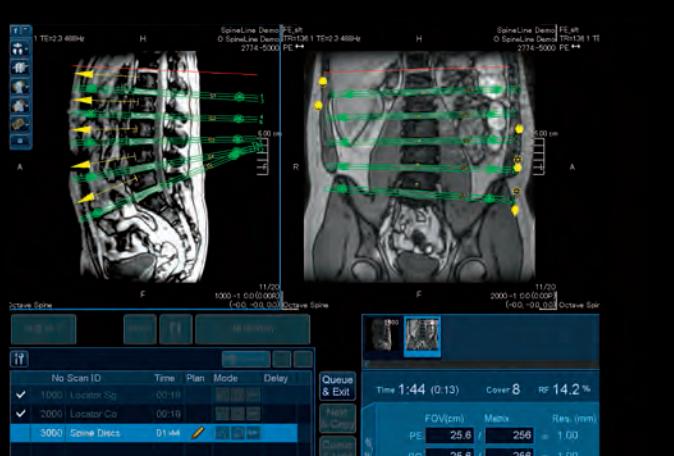
# Automated, reliable and robust

With the complexity of scan planning, achieving scan plane reproducibility can be quite challenging and time-consuming. EasyTech technology helps you improve workflow with automatic slice alignment for cardiac, neuro and spine exams, standardizing your workflow with automatic positioning.



## NeuroLine+

Achieve outstanding scan consistency for all your brain exams with NeuroLine+. The function's intelligent alignment algorithm allows you to automatically set up according to AC-PC and OM line.



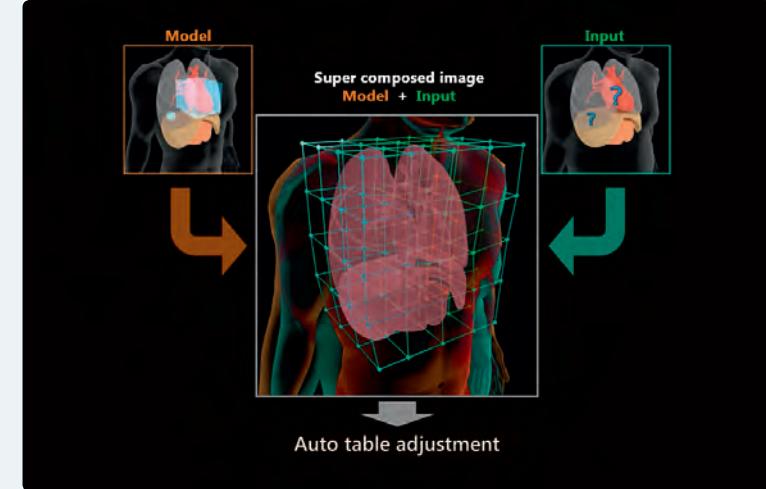
## SpineLine

With its auto-locator functionality, SpineLine allows you to plan spine studies quickly and easily. Sagittal and coronal locators allow you to set double-oblique slices, enhancing the reproducibility of follow-up exams.



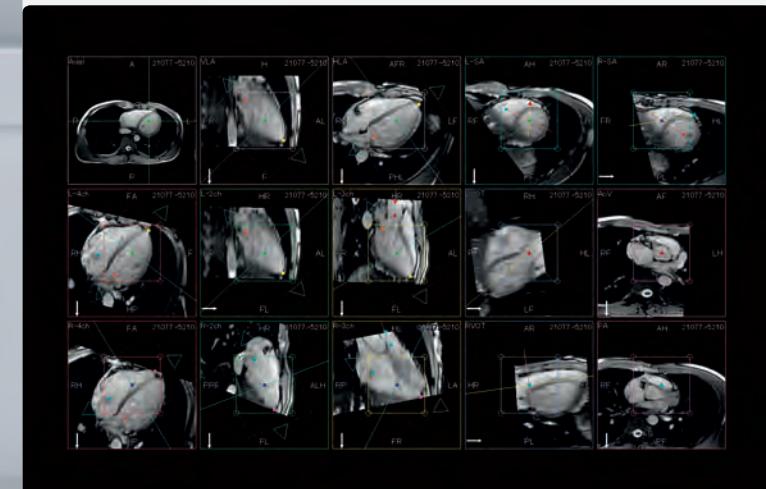
# Fast, high-quality cardiac exams

SUREVOI™ Cardiac and CardioLine+ allow you to significantly reduce the scan time and increase throughput. Challenging cardiac examinations can now be performed as part of your daily routine.



## SUREVOI Cardiac

Automatic detection of heart and liver with a non-rigid model allows for full workflow automation from table positioning to the Real-time Motion Correction (RMC), probe placement and fully automated cardiac planning.



## CardioLine+

CardioLine+ automatically identifies the 14 standard cardiac planes including right and left ventricle, as well as the four cardiac valves in a single breath-hold scan.

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## Workflow-driven applications making your work easier

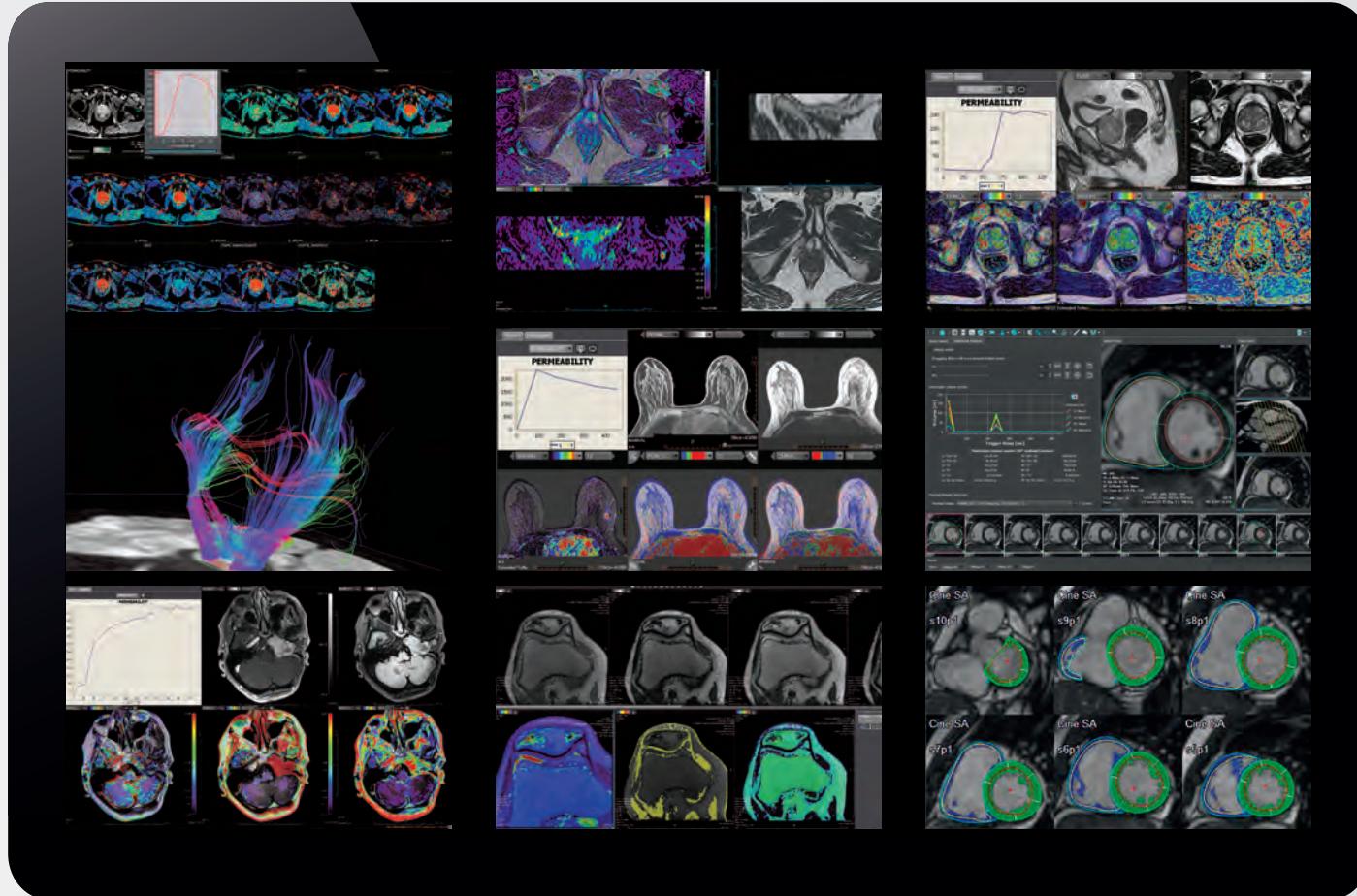
Toshiba Medical provides an advanced image processing environment that is designed to work in the most effective way with Vantage Galan 3T. Olea advanced image processing technologies are available through the Vitrea™ workstation.

### Vitrea multi-modality workstation

The Vitrea workstation is the foundation of Toshiba Medical's advanced visualization. It includes 2D, 3D and 4D viewing with stitching and subtraction, 3D analysis for vascular and organ post-processing along with basic export and reporting tools.

### MR advanced applications

The advanced applications provide access to enhanced clinical routine tools including diffusion, perfusion, curve kinetics with streamlined application workflows for a variety of target organs.

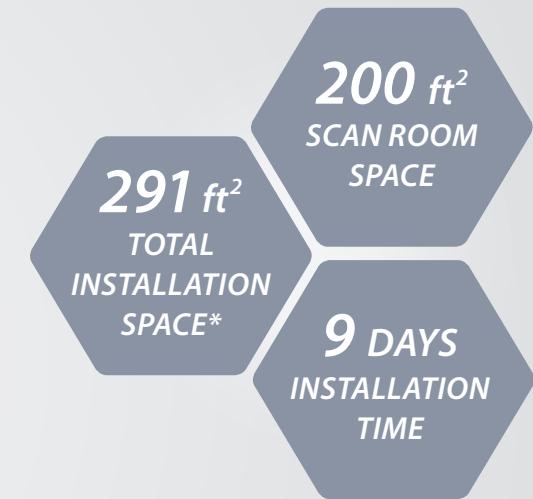
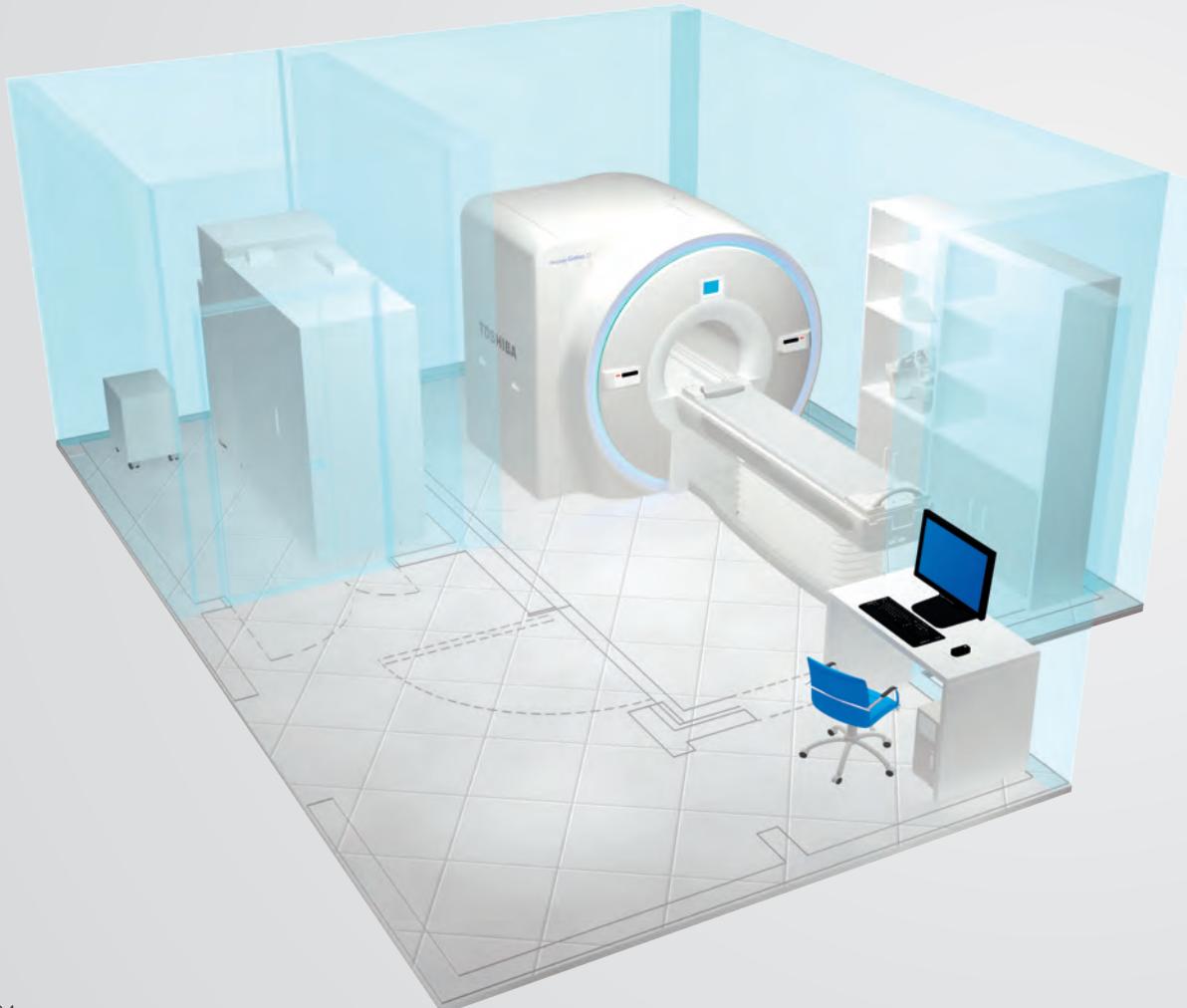


## MR Expert packages

The MR Expert packages provide access to the latest and most advanced tools and application to expert users for a wide variety of neuro, cardiac, orthopedic and body examinations.

# Resource-saving equipment for a compact space

Every inch on Vantage Galan 3T's design has been considered to maximize efficiency while minimizing energy consumption. The system's zero boil-off magnet fits into a small space, while providing a comfortable, open environment for your patients at the same time.



## Small size, big performance

The system's short and compact bore lowers patient anxiety and at the same time allows a 3T scanner to be installed in a room originally designed to hold a 1.5T system. The compact cabinet design simplifies and shortens installation time.

\* The 5 Gauss line is not confined within the scan room. Controlled access area should be taken into account by the facility when preparing for installation. The above specifications may not meet local requirements, for example access required by the Americans with Disabilities Act in the United States. Please consult with your architectural and/or electrical consultant for coding requirements. Some power equipment may be required to be placed in a dedicated electrical room.

Vantage Galan 3T

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Saving power on the go  
Vantage Galan 3T's power-saving eco mode is automatically triggered when you lower the patient couch to help you minimize your running costs. At only 70 kVA Vantage Galan 3T has the lowest rated power requirement in its class.

# An MR designed for patient comfort

A successful exam begins with a comfortable patient. Vantage Galan 3T is designed to maximize patient comfort without compromising image quality. Its 71 cm wide bore aperture allows you to image even large patients comfortably and efficiently. The slim gradient design provides significantly more space between the patient and the inside of the bore, greatly reducing acoustic noise with the system's patented Pianissimo™ technology.



## Reducing noise at the source

MR acoustic noise is one of the major complaints of patients and medical staff. Toshiba Medical's patented Pianissimo acoustic shielding technology significantly reduces the noise in and around the MRI environment for every sequence, every scan and every patient. Pianissimo Zen quiet sequences further reduce noise to just above ambient noise level, making exams even more comfortable and easier to complete.

\*99% reduction by unit of loudness level "dB" and 97% reduction by unit of perceived loudness "Sone"

# Give your patients a greater sense of freedom

Vantage Galan 3T offers an immersive in-bore MR Theater option. As the images displayed appear to be much farther away than the actual bore, the MR Theater provides a uniquely comfortable experience, encouraging patients to relax and stay still during the MR exam.



# *Vantage Galan 3T*

## **TOSHIBA AMERICA MEDICAL SYSTEMS, INC.**

[www.medical.toshiba.com](http://www.medical.toshiba.com)

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**Made For life**