

G•scan OPEN

Beyond conventional MRI



 **esaote**
HEALTH WITH CARE

A revolutionary MRI approach

G-scan Open introduces a groundbreaking MRI method tailored for comprehensive musculoskeletal and spine applications, enhancing diagnostic precision and confidence. The open and tilting magnet design represents a uniqueness in MRI practice towards a new era of imaging excellence and beyond traditional imaging.

G-scan Open represents an ideal solution for Spine Surgeons, Radiologists, Interventional Radiologists, Chiropractors, Sports Medicine clinics and Multidisciplinary clinics that want to provide comprehensive assessment.



Add value with the possibility of studying, joints, spine and head in Weight bearing.



Improve confidence in surgical planning and diagnosis of the spine.



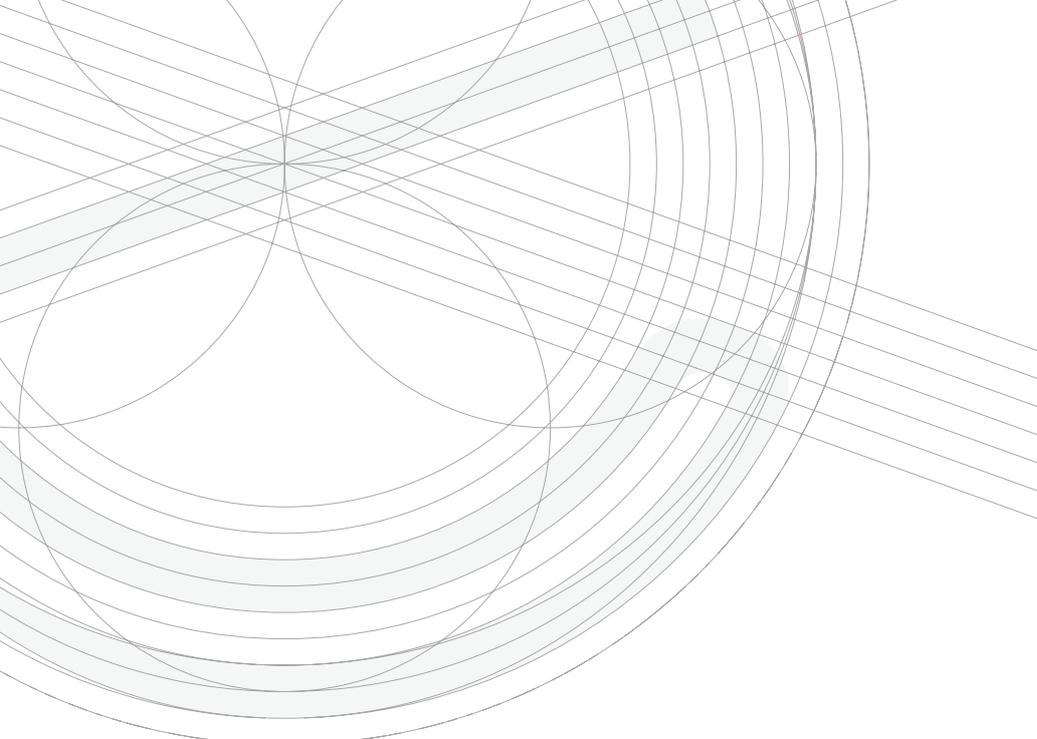
Advanced Q-Spine software available to facilitate analysis and segmentation of Lumbar Spine under load.



The power of the eXP technology platform to maximize performances and expand imaging capabilities.



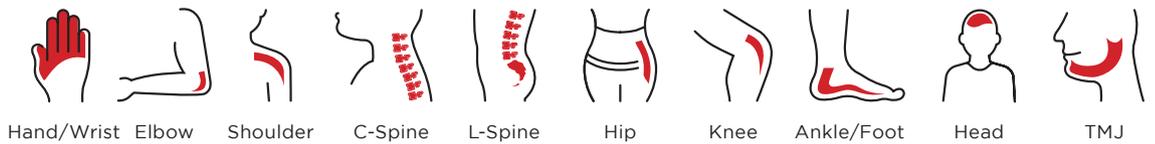
Possibility to combine weight-bearing exam with True-Motion and see joints and C-spine in movement.



Explore advanced possibilities

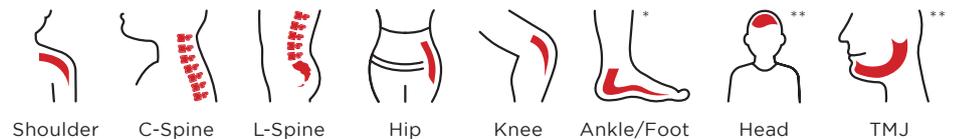


Supine MRI



Weight Bearing MRI

*Depending on room height
**Optional





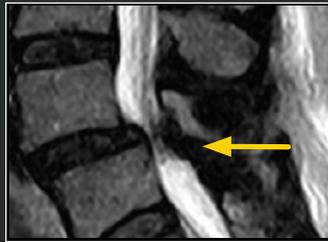
Weight-Bearing



Supine



Weight-Bearing



Weight-Bearing MRI is an advanced imaging modality poised to transform musculoskeletal diagnostics.

Unlike conventional lying-down MRIs, our upright MRI technology allows patients to assume weight-bearing positions during scanning, providing a true-to-life assessment of their condition under natural physiological load.

With Weight-Bearing MRI, clinicians gain unparalleled insight into spinal pathologies such as disc herniation and spinal stenosis, as well as precise evaluation of joint abnormalities affecting the knees, hips, and ankles. By capturing the body in its natural state, we unveil nuanced structural and functional anomalies that may elude detection in traditional imaging modalities.

Elevate your diagnostic capabilities and enhance patient care with Weight-Bearing MRI.



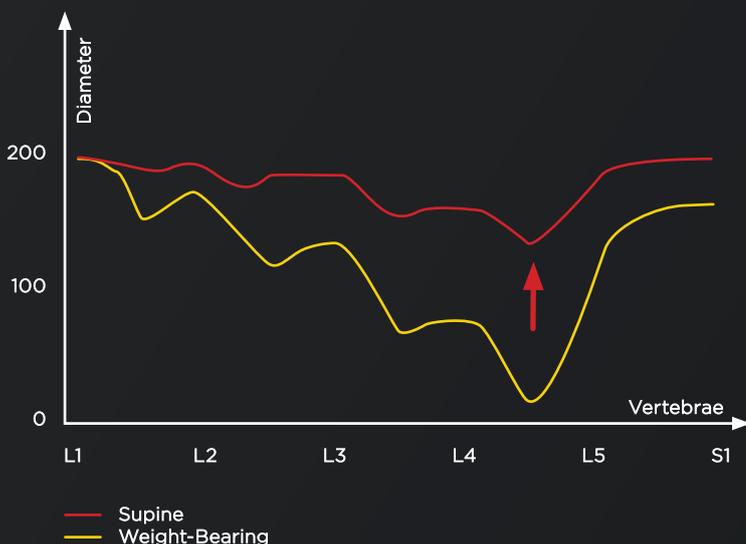
Q-Spine

Q-Spine is a support tool for the Visualization and Quantification of relative biomechanical modifications comparing Weight-Bearing and Supine MRI spine examinations. Based on the semiautomatic segmentation of the spine structures, it can be a useful resource to improved confidence in surgical planning and diagnosis of the spine.

- Numerical quantification of the relative changes with auto-measure of different parameters like listhesis index, spine section, vertebral collapse.
- 3D Reconstruction of the spine
- Virtual navigation inside the spinal canal.
- Generation of a pdf report.



Spinal Canal Section



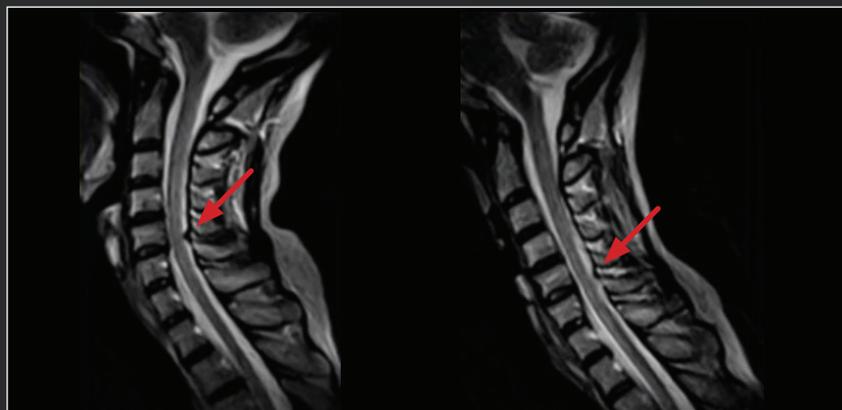
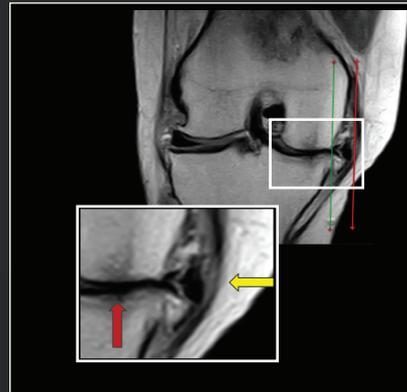
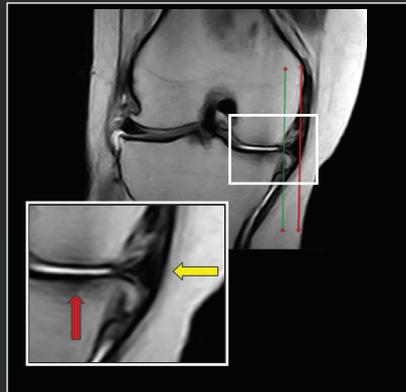
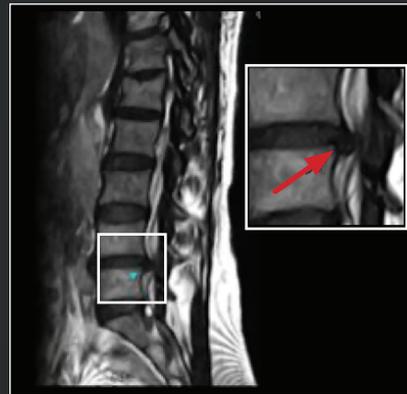
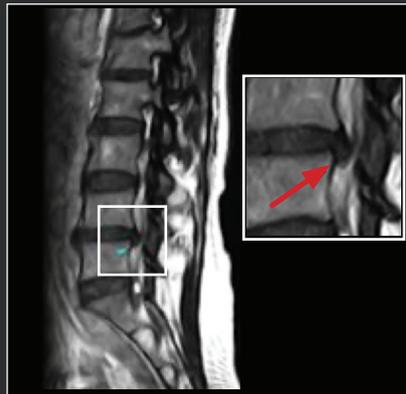
Change your perspective



Supine



Weight Bearing



Weight-bearing exam with dynamic imaging

Improve surgical planning

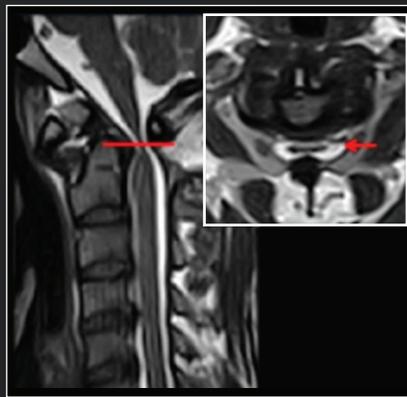


Supine



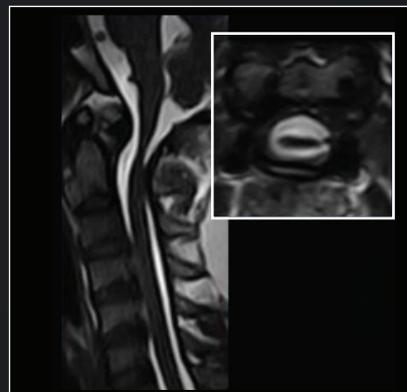
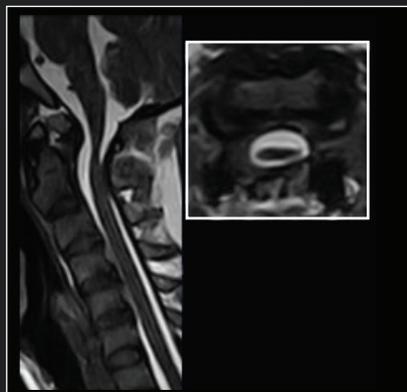
Weight Bearing

Pre surgery



Post surgery

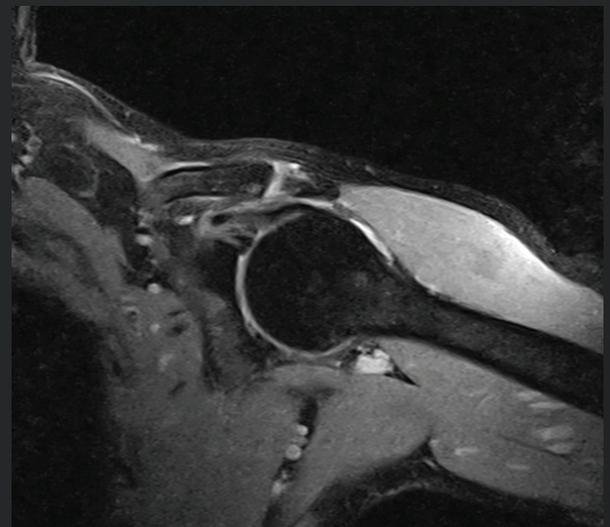
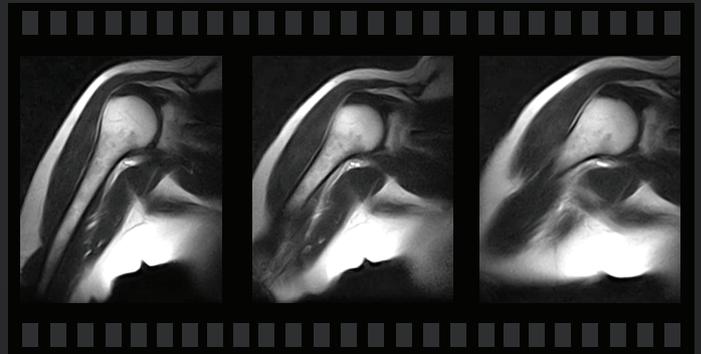
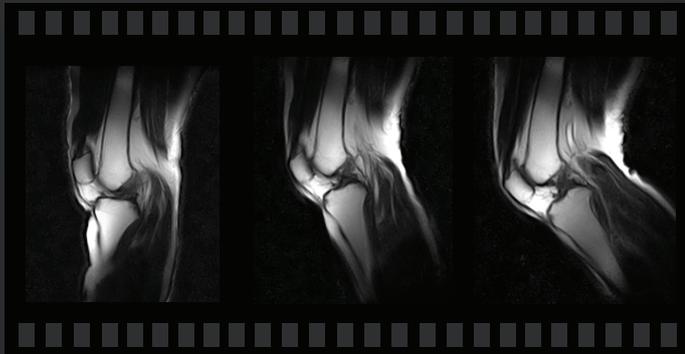
Weight Bearing can be beneficial when evaluating the stability of a pathology, suggesting whether going for a conservative treatment or surgery and, in such a case, which surgical approach would fit better.





The power of dynamic imaging

With the implementation of True-Motion, and thanks to the open magnet design, G-scan Open allows the operator to perform MRI with patients performing specific joint movements, providing real-time information.



Metal Artifact Reduction

Our advanced Metal Artifact Reduction sequence reduces distortion and artifacts caused by metallic implants, ensuring precise diagnostics and post treatment monitoring.



eXP Technology

Embedded in **G-scan Open**, the eXP platform provides advanced software techniques, such as Speed-Up and TR reduction, to reduce scan time and extra sequences designed to improve diagnostic output and accuracy.

- ✓ Speed-Up
- ✓ High resolution 3D isotropic
- ✓ X-Bone & SPED Dixon techniques
- ✓ True-Motion
- ✓ Metal Artifact Reduction



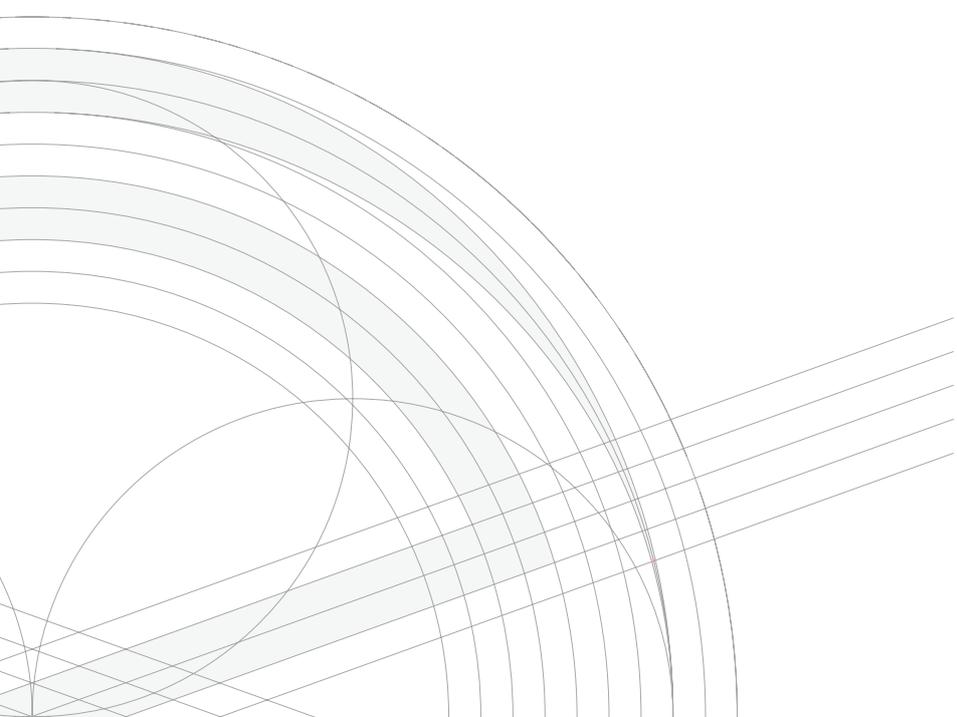
Customized Examination

With dedicated sequences, such as 3DHYCE for spine nerve roots, 3DSHARC for cartilage and Spin Echo Dixon (SPED), **G-scan Open** offers exhaustive protocols that can be tailored to specific needs.



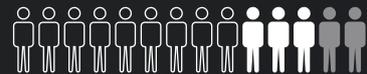
Improved Diagnostic Experience

Benefit from unique features, such as Metal Artifact Reduction and True-Motion, improving diagnostic output.



Increased productivity

Scan more patients per day through Speed-Up, an accelerating MR technique patented by Esaote.



Without losing quality



C-spine Axial 3DHyce
Conventional 4'43"



C-spine Axial 3DHyce
SpeedUp 2'57"

	Conventional	SpeedUp	Exam time Reduction %
3DHyce Ax	4'43"	2'57"	-37,46%
FSE T2 Sag	4'10"	2'47"	-33,20%
FSTIR Sag	4'49"	3'30"	-27,34%
SET1 Sag	4'28"	3'01"	-32,46%
	18'17'	12'25"	-32,09%

Images and data results courtesy of University of L'Aquila, Italy



Knee Axial FSE T2
Conventional 4'50"



Knee Axial FSE T2
SpeedUp 3'44"

	Conventional	SpeedUp	Exam time Reduction %
FSE PD Sag	3'52"	2'09"	-44,40%
FSE T2 Ax	4'50"	3'44"	-22,76%
XBONE T2 Cor	4'36"	3'49"	-17,03%
SET1 Cor	3'54"	2'54"	-25,64%
3D SHARC Ax	5'27"	3'48"	-30,28%
	23'01'	16'40"	-27,59%

Images and data results courtesy of University of L'Aquila, Italy

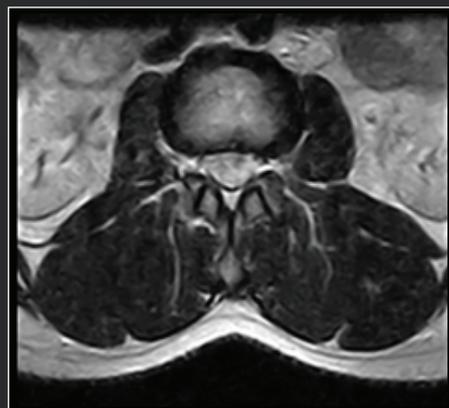
Engineered for Performance



FSE T2 Sagittal



SE T1 Sagittal



FSE T2 Axial



FSE T2 Axial



SPED Coronal



3D HYCE Coronal



GE T2 Axial



SPED Coronal



XBONE Coronal



FSE T2 Sagittal



SE T1 Sagittal



3D HYCE Axial



FSE T2 Sagittal



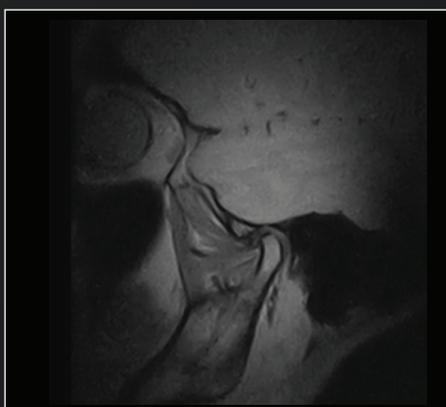
GE T1 Coronal



3D SST1 Sagittal



SPED Sagittal



FSE PD



Fast FSE T2 Axial

Delivery excellence

Complete set of receiving coils to achieve excellent performance and guarantee patient comfort for each anatomy/in standard examination and weight bearing.



Shoulder
(linear)



Knee
(DPA)



Hand, wrist
(DPA)



Ankle-foot
(DPA)



Shoulder
(DPA)



Shoulder*
(3 channels)



Cspine
(linear)



XL L-Spine*
(DPA)



Cspine*
(DPA)



Head*
(DPA)



L-Spine, large size
(4 channels)



L-Spine, small size
(4 channels)



Flexible hip*
(linear)



TMJ*
(dual channel)



*Optional Coil

Designed around the patient

- ✓ Anti-claustrophobia system thanks to magnet design.
- ✓ Enhanced patient experience due to low noise level during scanning.
- ✓ Conceived for a high level of comfort with optimized patient bed for supine and weight bearing studies.
- ✓ Wide accessibility thanks to the fast positioning with real time monitor and easy access.



*“The premature termination rate was reduced from **58%** to **8%** when using an open MRI configuration compared to a conventional close-bore magnet”.***

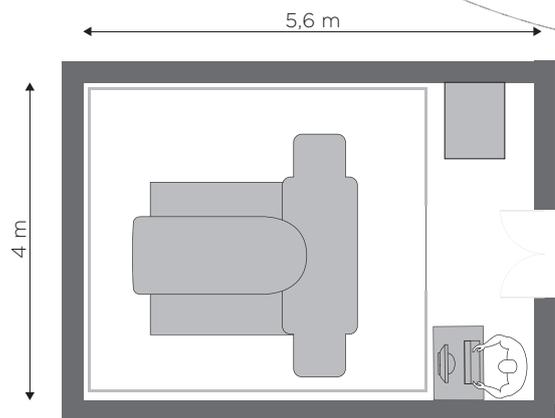


**Bangard C, Paszek J, Berg F, et al. MR imaging of claustrophobic patients in an open 1.0T scanner: motion artifacts and patient acceptability compared with closed bore magnets. Eur J Radiol. 2007;64:152-157.

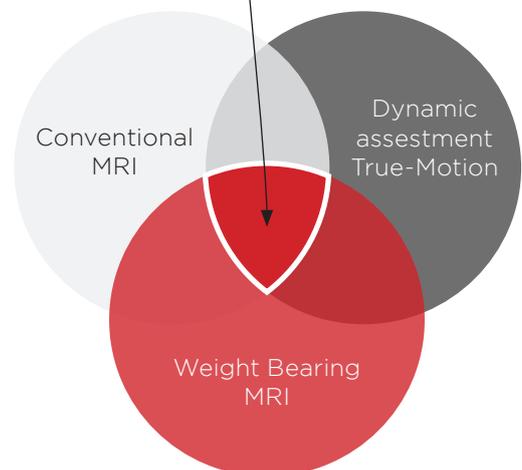
A comprehensive solution in only 23 square meters.

G-scan Open is a one room solution with compact installation and no major civil works required. This plug-and-play MRI system represents a sustainable answer to the modern demand for healthcare as it combines low power consumption with top level imaging quality.

A stand-alone solution that can offer a complete patient evaluation by performing the standard supine MRI, the weight bearing examination and the dynamic assessment thanks to the True-Motion.



G•scan^{OPEN}



Green MRI



One room Mri System with a minimum space of installation, **23 m2 (245 ft2)**, including electronics and console.



Plug-and-play solution with low electrical consumption: **0.4kVA OFF, 1.2kVA stand by, 2.4 kVA during acquisition.**



Easy installation, no helium required, no sophisticated cooling system and shielding cage can be installed without any construction works.

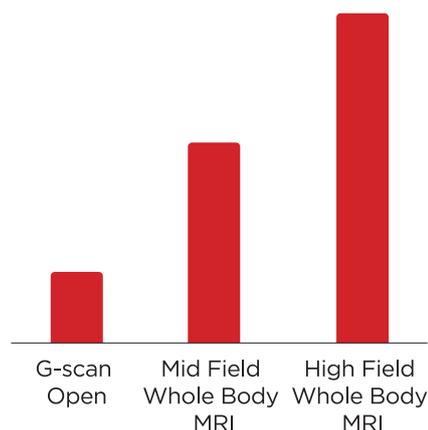


No dedicated electrical line; power supply voltage: 200-210/220-240 V 50/60 Hz



Permanent magnet technology guarantees high reliability and **low maintenance.**

Cost per examamination (electrical consumption)



Why choosing G-scan Open?



Financials

The stand alone solution that can offer a complete patient evaluation with minimal cost of ownership.



Patient-centric

Extremely low noise and no claustrophobia.



Sustainable MRI

One room MRI with reduced electricity consumption: 0.4kVA in system OFF.



Weight-Bearing MRI Community

Being an integral part of the journey.



True-Motion

Possibility to combine weight-bearing exam with True-Motion.



Q-Spine

Advanced support tools, like Q-Spine software.



Remote support and customer care

The remote connections for service and applications allows Esaote to react to any potential issue and to get you up and running faster!



Worldwide Meetings

To increase your knowledge in upright MRI imaging.



Be part of the scientific community

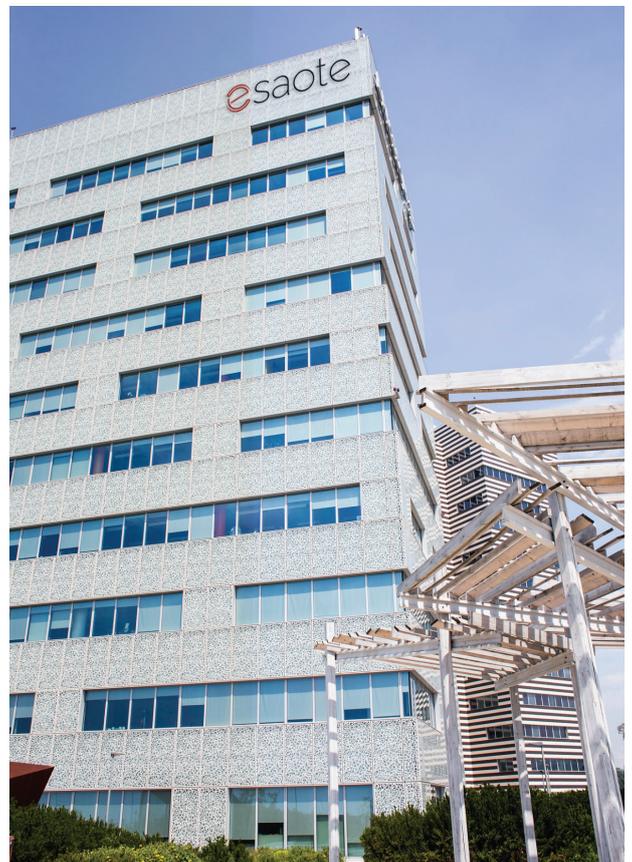
Esaote's strong partnership with universities and top-clinics from all over the world guarantees our ongoing alignment with the evolving needs and trends in the field of Weight Bearing MR Imaging. This collaborative approach not only enhances the comprehension of this innovative technique but also cultivates a spirit of cooperation and common goals to understand how weight-bearing MRI imaging can provide important indications to plan the surgery and obtain the best outcome for the patient.

Esaote MRI

As one of the top 10 diagnostic imaging providers globally, we uphold the highest quality standards in production and customer service processes, rooted in the renowned Italian expertise. With the long term experience in developing open MRIs and a **worldwide presence**, our commitment to excellence is a testament to the exceptional experience **made in Italy**.



Esaote team with some top spinal surgeons after an event on the spine.



Esaote headquarter in Italy.



160000502 Ver.01



Esate S.p.A. - sole-shareholder company

Via Enrico Meloni 77, 16152 Genova, ITALY, Tel. +39 010 6547 1, Fax +39 010 6547 275,
info@esate.com www.esate.com

Technology and features are device/configuration-dependent. Specifications subject to change without notice. Information might refer to products or modalities not yet approved in all countries. Product images are for illustrative purposes only. For further details, please contact your Esate sales representative.

 Italian design 

Please visit us online
for more information

