G•scan OPEN

Beyond conventional MRI

esaote

HEALTH WITH CARE

A revolutionary MRI approach

The **G-scan Open** offers a groundbreaking scanning experience tailored for comprehensive musculoskeletal and spine imaging, enhancing diagnostic precision and confidence. A proprietary tilting design pushes the boundaries of traditional imaging by providing a unique perspective for positioning patients in both the supine and tilting MRI weight-bearing positions, signaling a new era in imaging excellence.

The **G-scan Open** is an ideal solution for spine surgeons, radiologists, chiropractors, sports medicine, and multidisciplinary clinics to acquire comprehensive assessments.

Weight-bearing positioning adds value when examining MSK, head and joint anatomies.

Improve confidence in pre-surgical planning.

Advanced Q-Spine software available facilitates analysis and segmentation of spine under load.

eXP

Experience the power of the eXP technology platform to maximize performance and expand imaging capabilities.

Combine a weight-bearing exam with True-Motion technology to see the movement of the joints and C-spine regions.

G•scan OPEN

Explore advanced possibilities

Supine MRI

Hand/Wrist Elbow Shoulder C-Spine L-Spine Hip Knee Ankle/Foot Head** TMJ**

Weight Bearing MRI

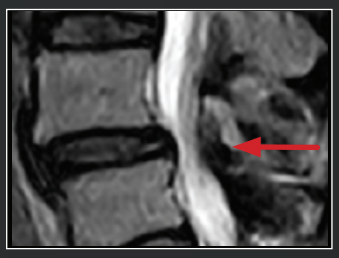
Shoulder C-Spine L-Spine Hip Knee Ankle/Foot* Head** TMJ**

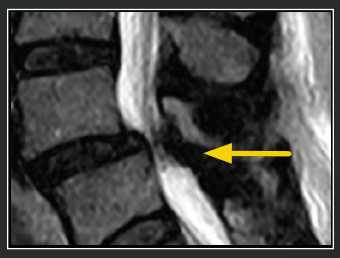
*Depending on room height
**Optional

Weight-Bearing

Supine

Weight-Bearing





Weight-Bearing MRI is an advanced imaging technique primed to transform musculoskeletal diagnostics.

Unlike conventional supine MRIs, the tilting **G-scan Open** 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 avoid detection in traditional imaging setting.

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

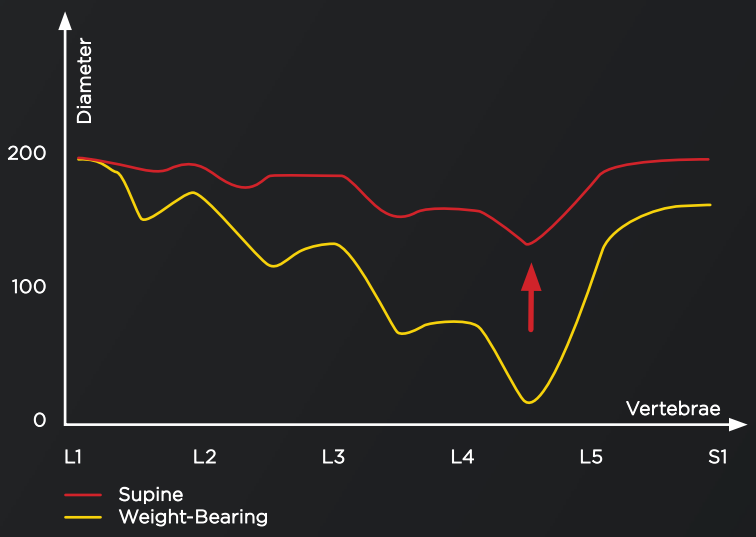
Q-Spine

Q-Spine is a support tool developed to visualize and quantify biomechanical changes when performing both weight-bearing and supine scanning during a lumbar spine examination. Based on the semiautomatic segmentation of the spine structures, **Q-Spine** serves as a valuable resource to improve confidence in diagnosing spine diseases and pre-surgical planning.

Key features include:

- Numerical quantification that detects relative changes of different spine abnormalities such as Listhesis Index, spine canal section, and vertebral collapse.
- 3D Reconstruction of the spine
- Virtual navigation inside the spinal canal.
- Generation of a pdf report.

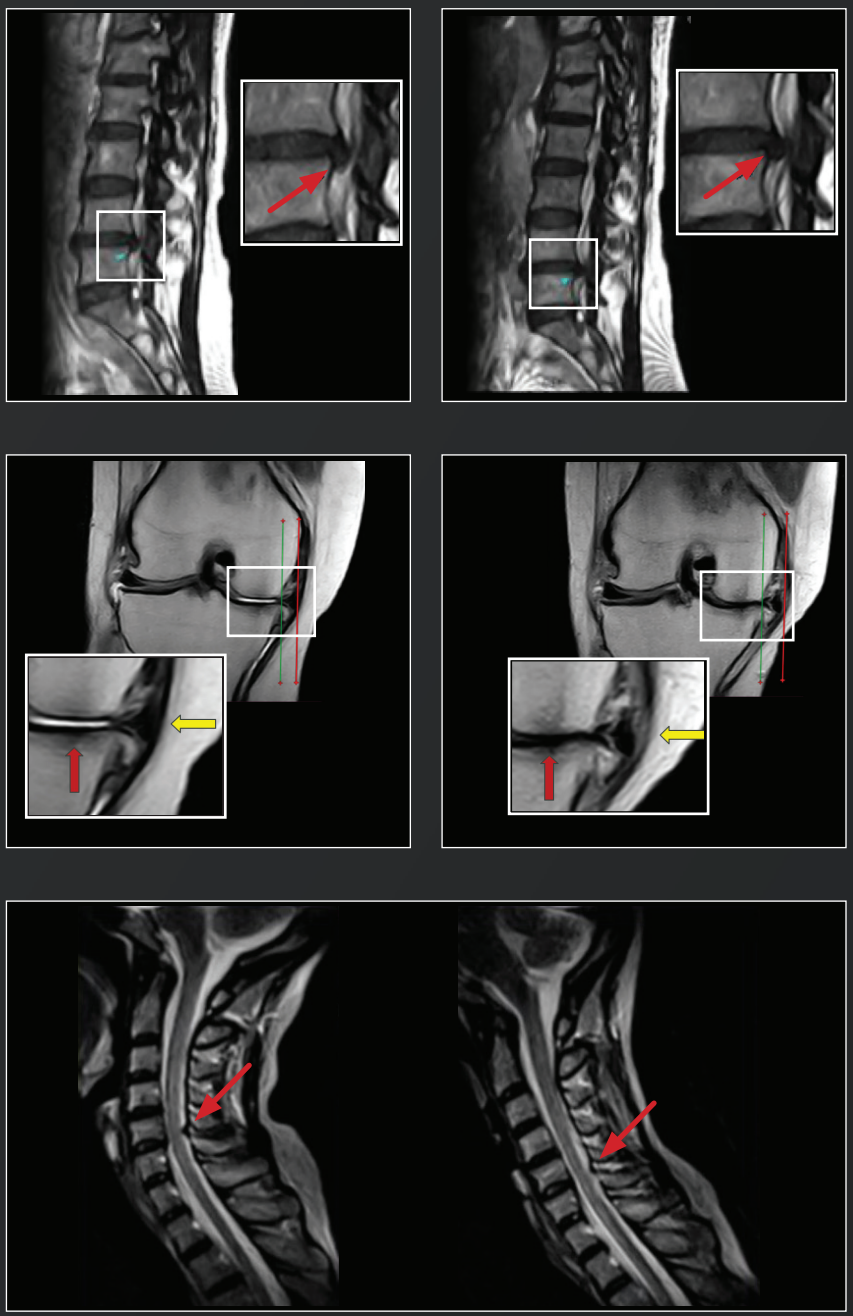
Spinal Canal Section



Change your perspective

Supine

Weight Bearing



Weight-bearing exam with dynamic imaging

**Courtesy of University L'Aquila and IOM Prof. Luigi Manfrè -Chairperson for Spine Diagnostic and Interventional ESNR, Director of the Mini-Invasive Spinal Interventional Operations Unit -IOM*

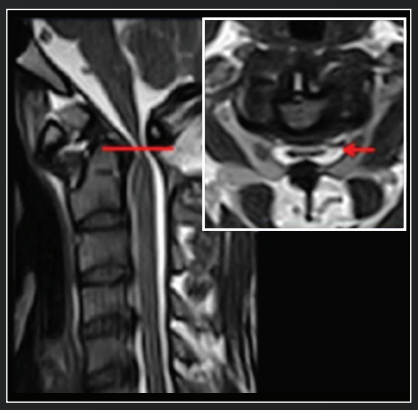
G•scan OPEN

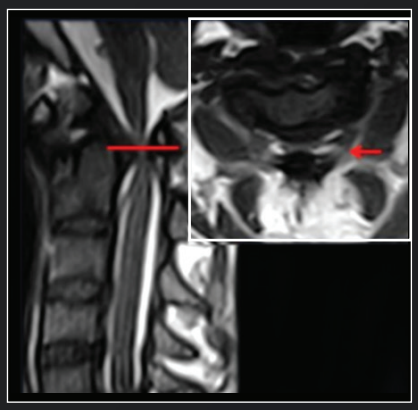
Improve surgical planning

Supine

Weight Bearing

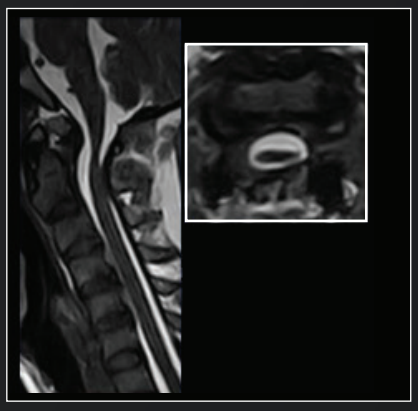
Pre surgery

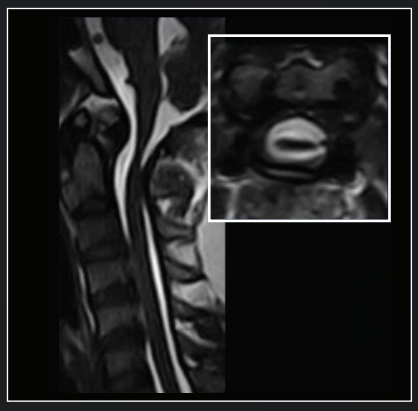




Post surgery

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.

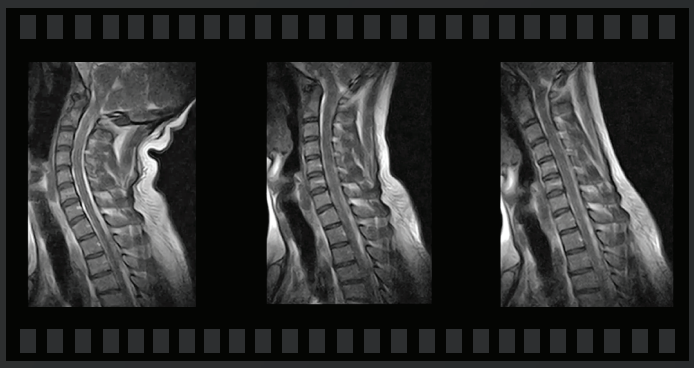


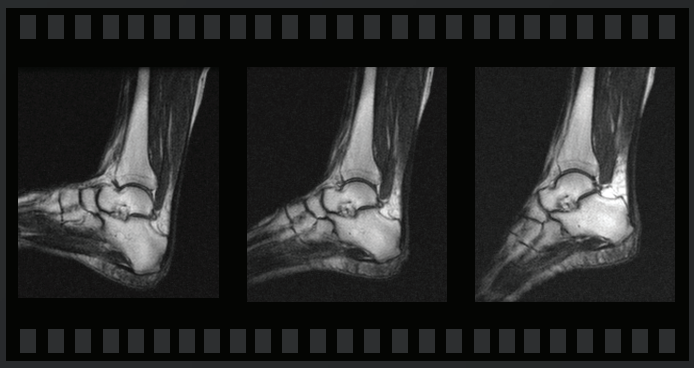


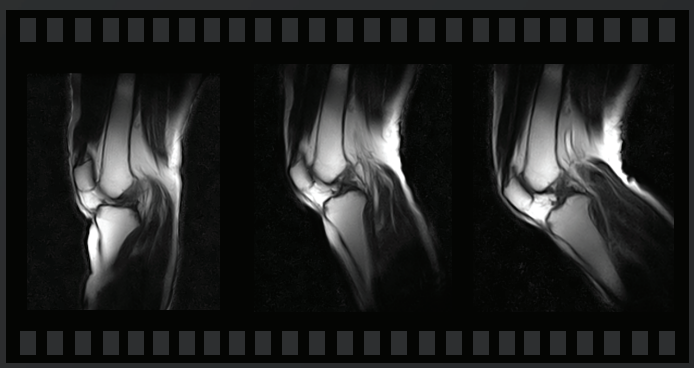
**Courtesy of University L'Aquila and IOM Prof. Luigi Manfrè -Chairperson for Spine Diagnostic and Interventional ESNR, Director of the Mini-Invasive Spinal Interventional Operations Unit -IOM*

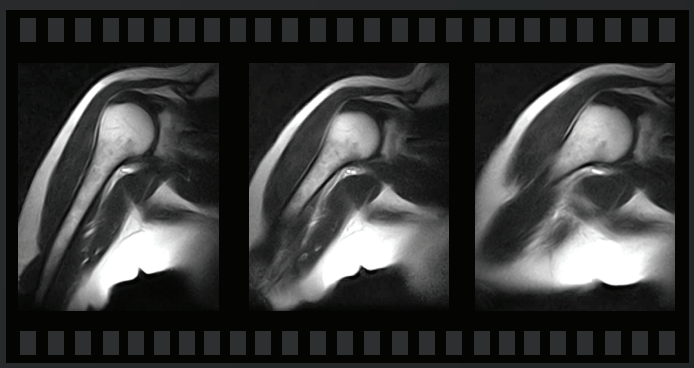
The power of dynamic imaging

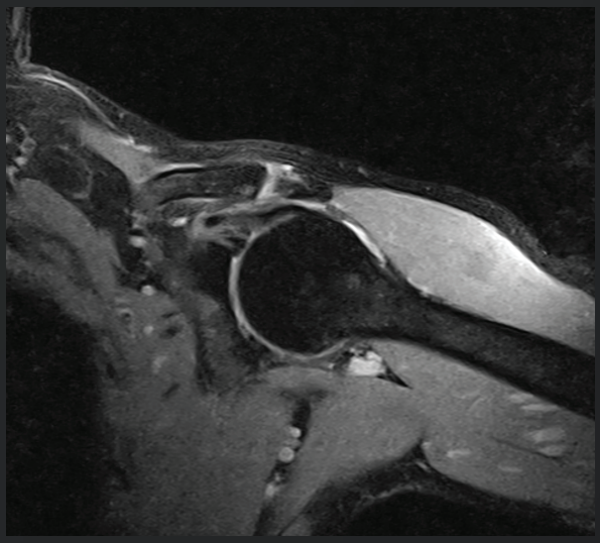
With the implementation of True-Motion, and thanks to the open magnet design, G-scan Open allows the operator to perform MRI with patients performing specific joint movements, providing real-time information.











Metal Artifact Reduction

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




** X-MAR is not available for sales in USA; MAR is available world-wide.*

eXP Technology

Integrated inside the **G-scan Open**, the eXP platform provides advanced software acquisition techniques, such as Speed-Up and TR reduction, to reduce scan time and 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), the G-scan Open offers extensive protocols that can be customized for 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 with Speed-Up, an acceleration acquisition method patented by Esaote.

Without losing quality

C-spine 3DHyce Axial
Conventional 4'43"

C-spine 3DHyce Axial
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 FSE T2 Axial
Conventional 4'50"

Knee FSE T2 Axial
SpeedUp 3'44"

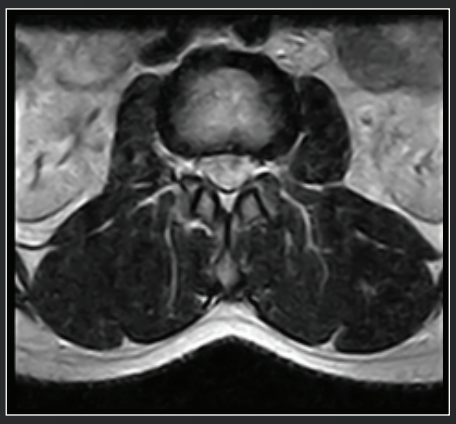
	Conventional	SpeedUp	Exam time Reduction %
FSE PD Sag	3'52"	2'09"	-44,40%
FSE T2 Ax	4'50"	3'44"	-22,76%
XBONE T2 Cor	4'36"	3'49"	-17,03%
SET1 Cor	3'54"	2'54"	-25,64%
3D SHARC Ax	5'27"	3'48"	-30,28%
	23'01'	**16'40"**	**-27,59%**

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

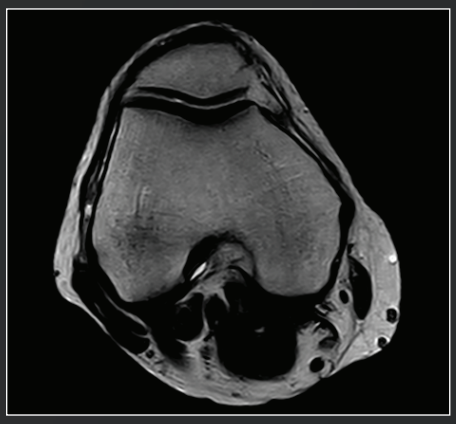
Engineered for Performance

L-spine FSE T2 Sagittal

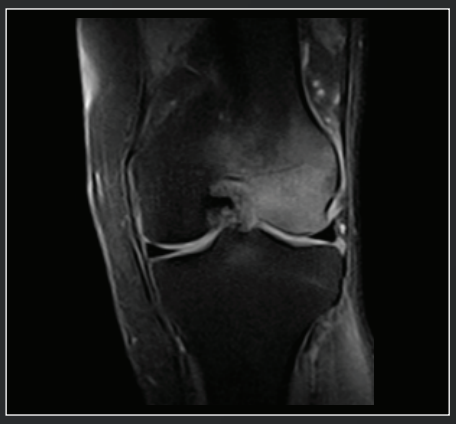
L-spine SE T1 Sagittal



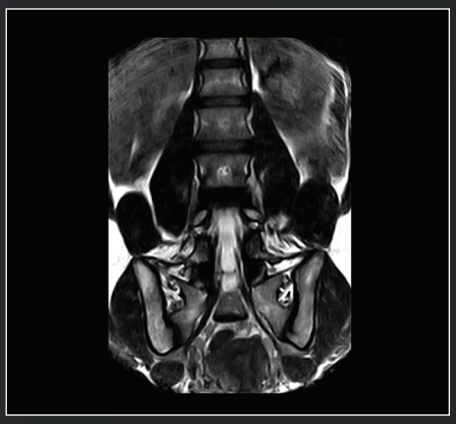
L-spine FSE T2 Axial



Knee FSE T2 Axial



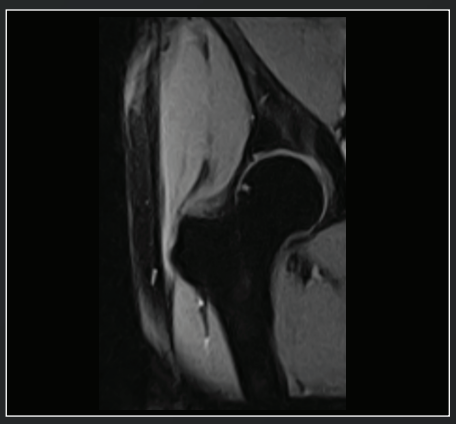
Knee SPED Coronal



L-spine 3D HYCE Coronal

Shoulder GE T2 Axial

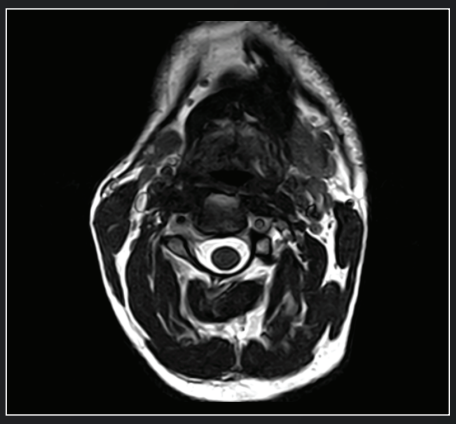
Shoulder SPED Coronal



Hip XBONE Coronal

Cervical spine FSE T2 Sagittal

Cervical spine SE T1 Sagittal

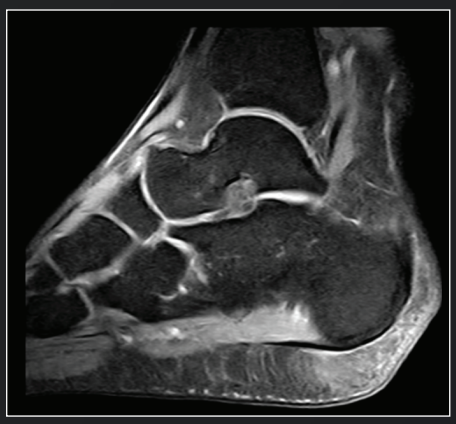


Cervical spine 3D HYCE Axial

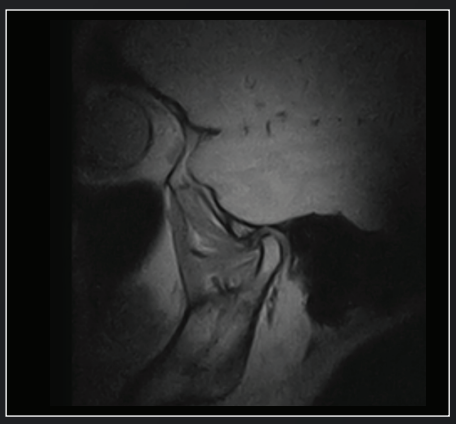
T-spine FSE T2 Sagittal

Foot GE T1 Coronal

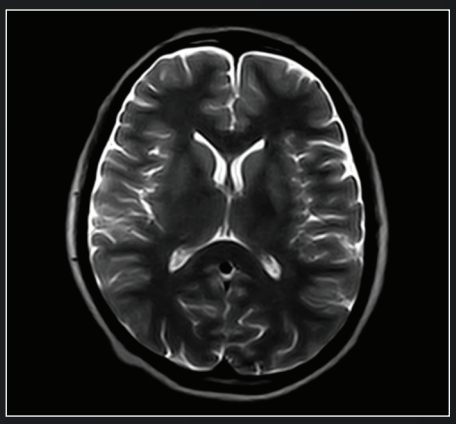
Wrist 3D SST1 Sagittal



Ankle SPED Sagittal



TMJ FSE PD Sagittal



Head FSE T2 Axial

Delivery excellence

The **G-scan Open** comes with a complete set of high-performance receiving coils, providing exceptional patient comfort, and covering a wide anatomical range for scanning in the supine and weight-bearing positions.

Shoulder
(linear)

Knee
(DPA)

Hand, wrist
(DPA)

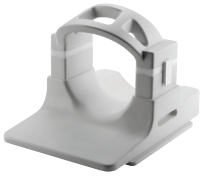
Ankle-foot
(DPA)

Shoulder
(DPA)

Shoulder*
(3 channels)

Cspine
(linear)

XL L-Spine*
(DPA)



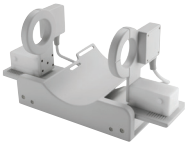
Cspine*
(DPA)

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

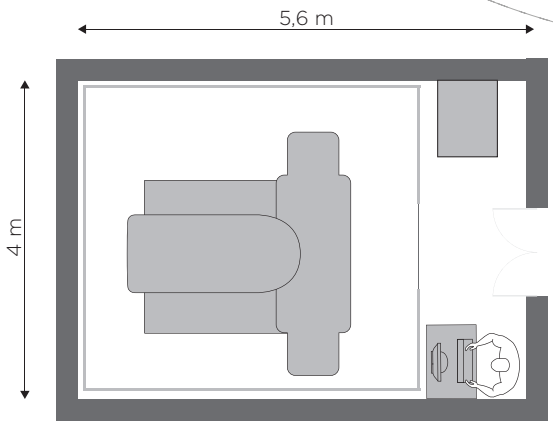
- Open, anti-claustrophobia design.
- Designed for maximum patient comfort with an optimized patient bed that supports both supine and weight-bearing exams.
- Low ambient noise enhances the patient experience.
- Wide gantry design and real-time monitoring offer greater patient access and positioning.

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

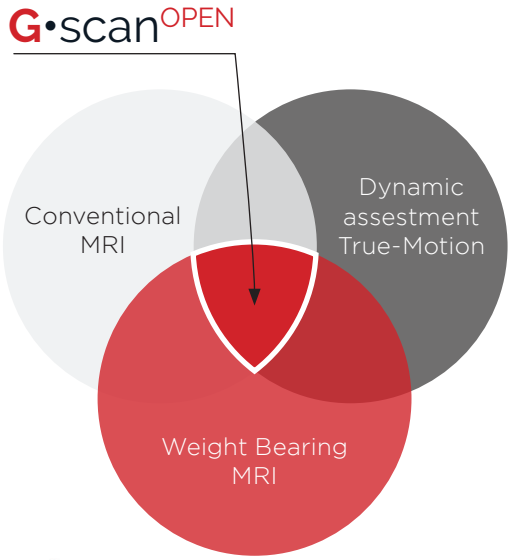
**Bangard C, Paszek J, Berg F, et al. MR imaging of claustrophobic patients inan open 1.0T scanner: motion artifacts and patient acceptability comparedwith closed bore magnets. Eur JRadiol. 2007;64:152–157.

A compact solution that only needs 23 m² of space

The **G-scan Open** is a compact one-room solution, reducing upfront installation costs. 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 dynamic stand-alone solution that offers a complete patient evaluation by performing both supine and weight-bearing examinations in a single scan.



Green MRI

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

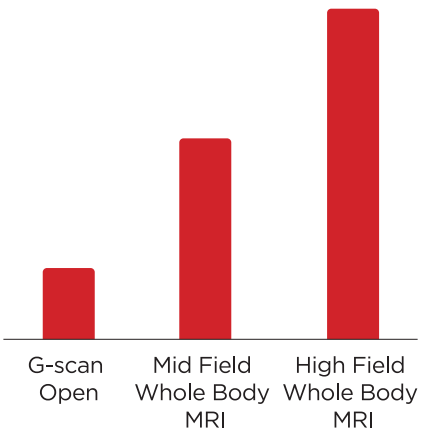
Plug-and-play solution with low electrical consumption: **0.4kVA OFF, 1.2kVA stand by, 2.4 kVA during acquisition.**

No helium or cooling system is required, making installation simple and easy. RF cage shields can be installed without additional room modifications or construction costs.

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 a low cost of ownership.

Patient-centric
Extremely low noise and no claustrophobia.

Sustainable MRI
One room MRI with reduced electricity consumption: drawing only 0.4kVA when the system is OFF.

Weight-Bearing MRI Community
Being an integral part of the journey.

True-Motion
Option to combine a weight-bearing exam with True-Motion acquisition.

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 weight-bearing 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 team with some top spinal surgeons after an event on the spine.

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 headquarter in Italy.

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

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