

HITACHI
Inspire the Next

AIRIS Light Brings you to a new field.





Compact yet Sophisticated

Hitachi has brought "Open MRI" one step further in its evolution, to better assist medical professionals who work at the forefront of healthcare. AIRIS Light offers radiologists advanced imaging solutions alongside a well-engineered post-processing package. The system provides new imaging technology and workflow solutions that are able to improve the efficiency of examinations, while achieving a high performance output. The design and size of AIRIS Light offers a compact footprint, ideal for a variety of different examination environments. It can easily be accommodated into restricted spaces.



Compact yet Sophisticated

Wide Open Gantry

The wide open gantry of AIRIS Light offers patients a calm scanning atmosphere. The beautiful system design focuses on high patient comfort and is the result of Hitachi's relentless patient-centric dedication.



Compact yet Sophisticated

L a t e r a l l y A l i g n e d T a b l e

The adoption of AIRIS Light's laterally aligned table results in a compact footprint together with ease of use.

The free-floating table top enables fast positioning of the target region to the centre of the magnetic field, providing high-quality isocentric imaging. In addition, the wide range of lateral table movement allows easy positioning of peripheral anatomy, such as the shoulder or knee, in the centre of the magnetic field.



AIRIS Light Benefits

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	Quality imaging that expands your diagnostic capabilities.	
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	Opening up new possibilities in your daily routine.	
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	Cost and performance that help protect your wallet.	

Diagnosis Benefit:01

Advanced Imaging Technology

More accuracy – more clarity – more beauty.
With AIRIS Light, you will experience superior image quality in an open MRI system, powered by Hitachi's advanced imaging technology know-how. It covers today's demands on MRI, expanding your diagnostic capabilities.



IMAGE QUALITY ▶▶▶

Benefit:01

Radiologist

- You don't compromise on image quality?
- You are looking for a feature that reduces artefacts?
- You want to use non-contrast imaging, relevant for a wide range of applications?

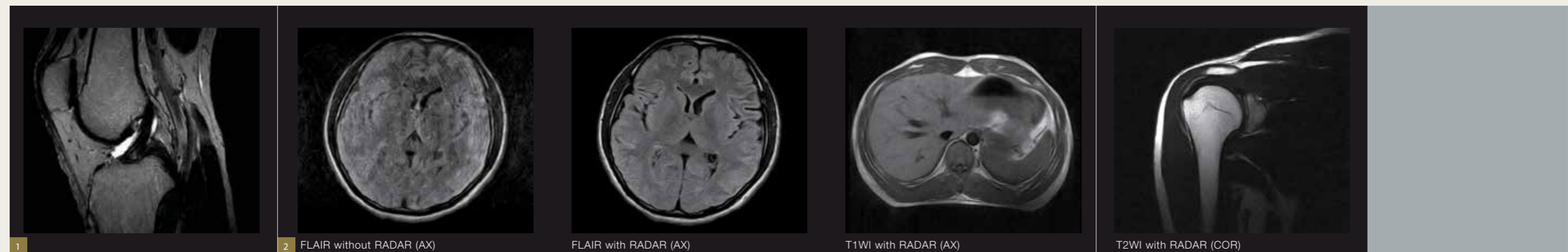
AIRIS Light.

※The photo is for illustration purpose only.

▶▶▶ IMAGE QUALITY powered by Hitachi's Advanced Imaging Technology

AIRIS Light - Keeps You Evolving

AIRIS Light is equipped with Hitachi's proprietary technologies developed for high-field MRI systems, such as RADAR and VASC-ASL. It comes with a new image reconstruction matrix of 2048 x 2048, which provides high-definition imaging.

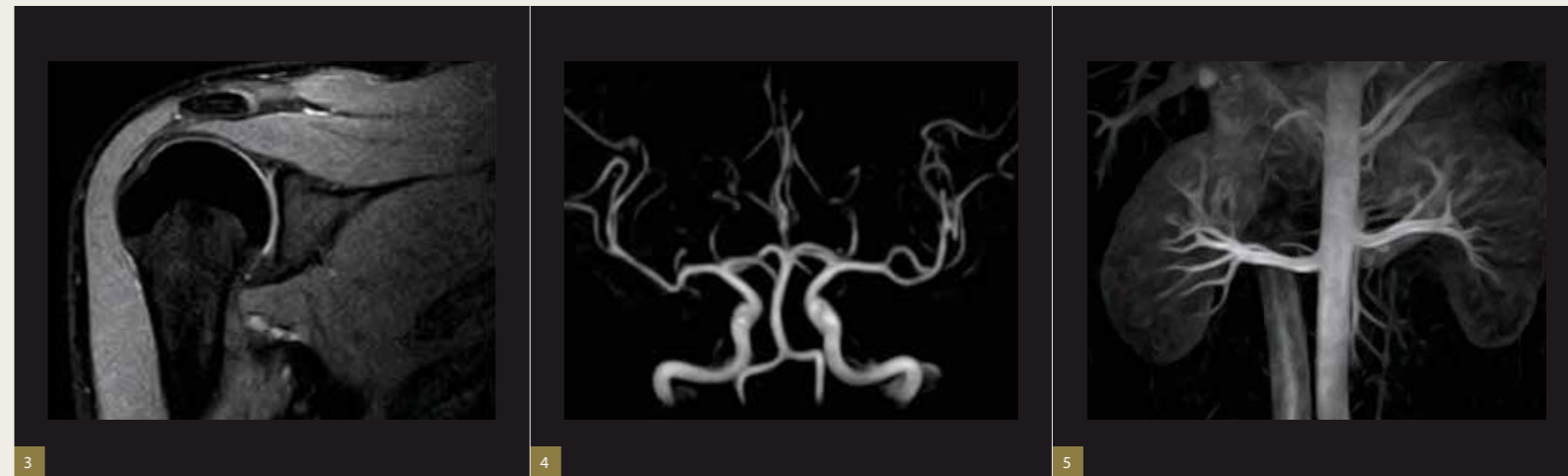


High Resolution Imaging

For AIRIS Light, Hitachi has developed an image reconstruction matrix of 2048 x 2048 providing high-definition imaging and clinical solutions to maximise diagnostic confidence.

RADAR* (Motion Artefact Reduction Function)

Motion artefacts can cause serious problems during MR imaging. RADAR based on a radial scan technology supports the reduction of motion artefacts. The advantage of this function is versatility. It is applicable to any imaging plane as well as various pulse sequences, such as T2 and T1 weighted images. It is particularly effective for imaging the shoulder joint, which is usually significantly influenced by respiratory motion.



FatSep (Fat-Water Separation method)

FatSep is a method that suppresses fat signals using differences in proton resonance frequency between water and fat. FatSep, less influenced by inhomogeneity of magnetic fields, enables fat suppression in a wide range of body regions.

FITT

MR angiography is an important imaging function for MRI diagnosis, considering that the basic performance of a system is essential in MRA imaging. AIRIS Light is equipped with "FITT," Hitachi's comprehensive imaging technology which allows improvement in multi-slab MRA.

VASC-ASL*

VASC-ASL is a non-contrast MRA imaging function that visualizes blood flow labeled with IR pulses, applying 3D BASG (balanced sequence) in the abdomen. This sequence can be used for imaging the portal vein and renal arteries where blood flows at high speed.

* Option

Benefit:02

Examination

Easy Operation / Patient-centric Design



FEATURES ▶▶▶

Benefit:02

Operator

- You need high-resolution images, despite a low magnetic field strength?
- You want to be able to scan patients who feel confined in a conventional MRI?
- You need quick and simple adjustment of image parameters and settings?

AIRIS Light.

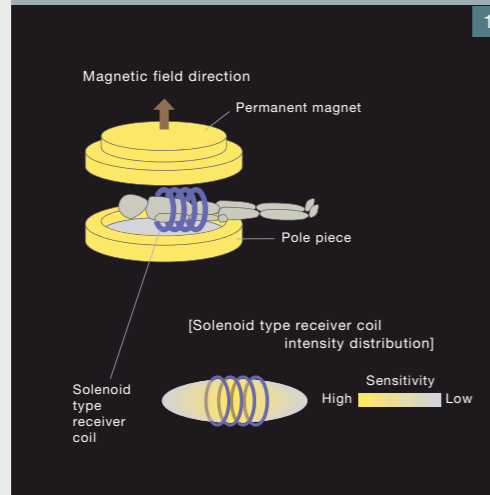
High-precision technology evolved for quick and accurate diagnosis. Hitachi's permanent magnet MFI technology has brought image quality to a new level. AIRIS Light, contrary to closed type MRI systems, allows you to scan your patients in almost any position, opening up new possibilities in your daily routine.

※The photo is for illustration purpose only.

FEATURES

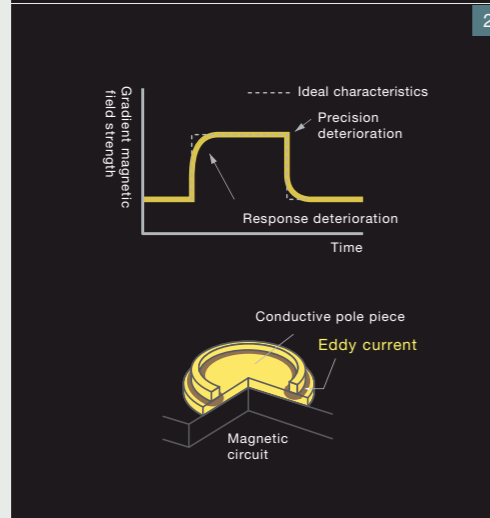
Ease of use for operators / comfort for patients

AIRIS Light is packed with Hitachi's trusted technology know-how in permanent, magnetic field MRI, which has been accumulated through many years of experience. It encompasses high sensitivity, solenoid type receiver coils, new gradient magnetic field systems and improved static magnetic field uniformity.



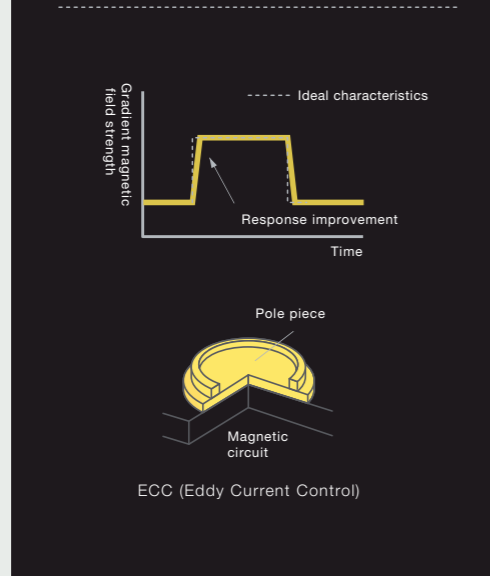
High-sensitivity Solenoid Type Receiver Coils

AIRIS Light uses a vertical magnetic field and solenoid type receiver coils. These coils are around 40% more sensitive than the receiver coils of horizontal magnetic field systems. They provide a wide FOV, even when using a surface coil.



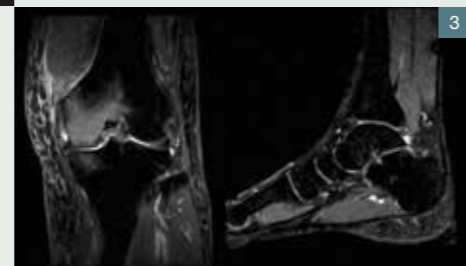
Advanced Gradient Coil System

Suppressing eddy currents in the gradient coil system is key to providing stable high quality images. Eddy currents can cause deformation of the gradient magnetic field waveform which results in a direct deterioration of image quality. Hitachi not only uses materials that have low eddy current susceptibility but have also developed the ECC (Eddy Current Control) feature that predicts and controls eddy current generation.



SuperShim

Uniformity of the static magnetic field is a crucial requirement in MRI. SuperShim is equipped with both a linear and high order shimming function. This feature is able to correct for static magnetic field inhomogeneity which is impossible to adjust adequately by linear shimming alone. SuperShim realizes the frequency-selective fat suppression technique even with a low field MRI system.



Patient-centric Design

AIRIS Light's innovative design allows patients to be accompanied by a friend or relative during scanning to help them feel at ease, extending MRI imaging opportunities in the anxious patient.



Laterally Aligned Table

The adoption of AIRIS Light's laterally aligned table results in a combination of a compact foot print and ease of use. The free-floating table top enables quick positioning of the target region to the centre of the magnetic field, providing high-quality isocentric imaging. In addition, the range of lateral table movement allows easy positioning of peripheral anatomy, such as the shoulder or knee, in the centre of the magnetic field.



Parameter Guidance Function

In the event of inappropriate parameter input, this function is able to automatically display various substitute parameters.



Curved MPR

Arbitrary curved slices can be effortlessly reconstructed from 3D image data. This technology allows simultaneous reconstruction along multiple curves, which is especially useful in the event of scoliosis.

Decision Making Benefit:03

Attractive Cost of Ownership

AIRIS Light is a very compact MRI system, equipped with advanced imaging features. It impresses with its small footprint, allowing it to keep running costs low and make MRI affordable.

PERFORMANCE ▶▶▶

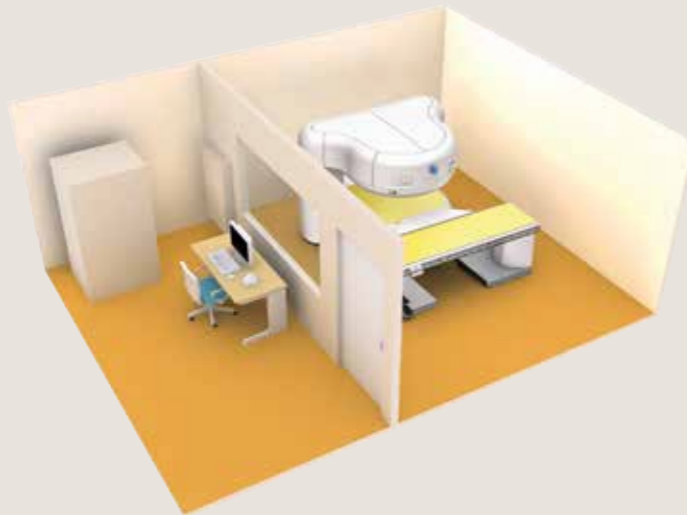
Benefit:03

Decision Making

- You are looking for an MRI system that fits into a small examination room?
- You are looking for a highly reliable MRI system?
- You need to reduce your running costs?

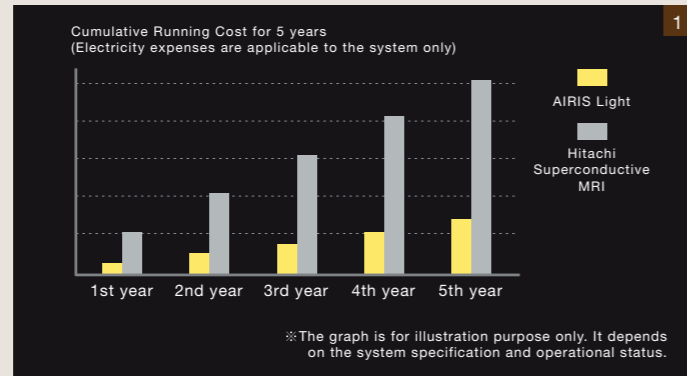
AIRIS Light.





Siting Flexibility

AIRIS Light has very limited stray fields meaning that scan rooms can be kept small. It does not require an equipment room, a chiller unit or additional equipment associated with superconductive MRI installations. Consequently, AIRIS Light can be installed into confined spaces frequently found in many medical facilities.



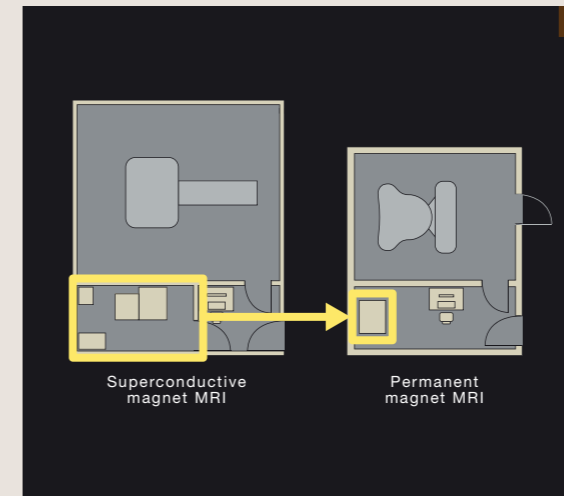
Profitability

Since AIRIS Light is designed to run on a single phase power supply, initial investment can be kept to a minimum. In addition, low electricity consumption keep monthly running costs very affordable.

▶▶▶ PERFORMANCE

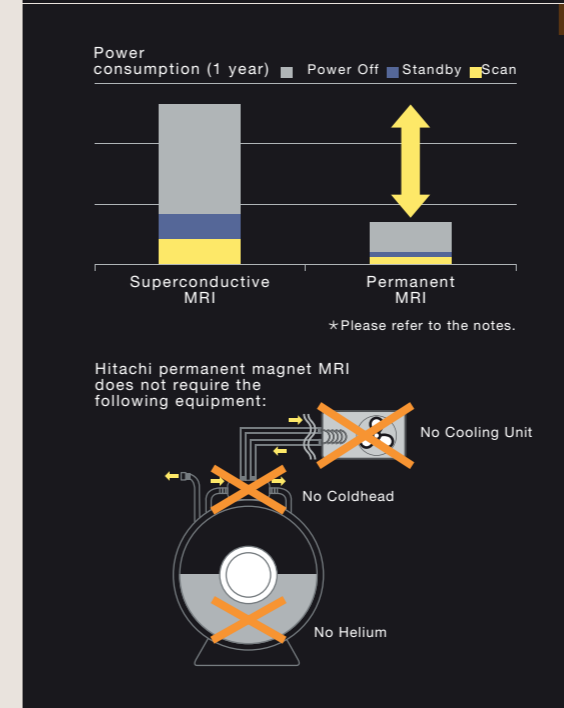
Cost control and performance for Decision Makers

AIRIS Light's real value is its attractive cost of ownership. The eco-friendly permanent magnet helps you to expand your installation opportunities and minimize running costs, all of them contributing to maximize cost performance.



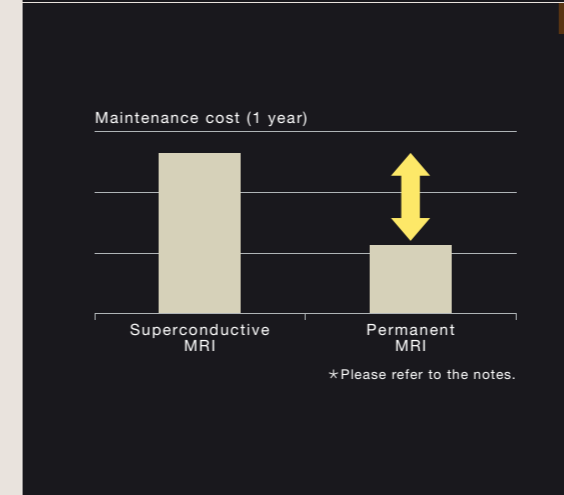
Keeping Installation Costs Low

Thanks to AIRIS Light's reduced dimensions and fringe field, the examination room dimensions can be minimal, thereby reducing the costs of the shield room. Also, the system does not require an additional equipment room helping to reduce the required floor space; powerful features which effectively help to save installation costs.



Keeping Power Consumption Low

AIRIS Light requires little power (10 kVA), keeping monthly electricity cost low and affordable. Compared with a superconductive MRI, AIRIS Light's electric power consumption is significantly lower, which makes it a very attractive workhorse.

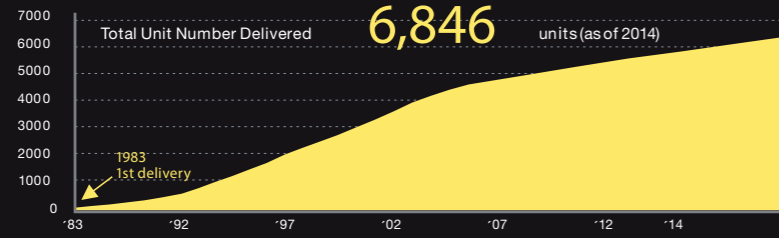


Keeping Maintenance Costs Low

Since AIRIS Light does not run on cryogen (Helium), it avoids the risk of quenching unlike superconductive MRI, ensuring AIRIS Light is both reliable and stable. In addition, you can stay away from expensive, periodic replacement investments such as the cold head.

Note: The information and graphs provided here are based on data of systems used in Japan. Conditions may vary according to region. Please contact our sales staff for more details.

■ AIRIS Light Layout ■



Data: Ex-factory record of Hitachi Medical Corporation

Reliability

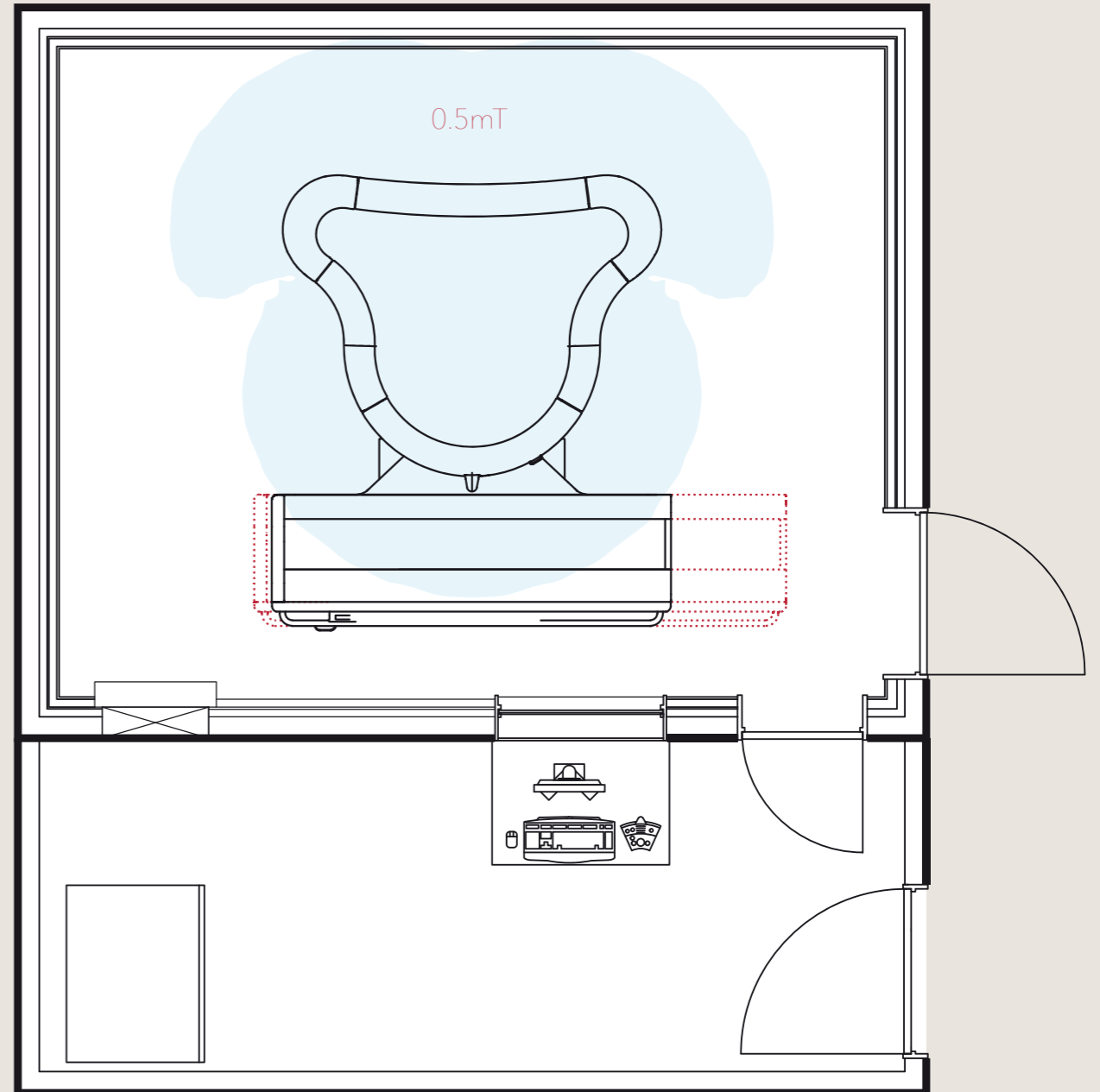
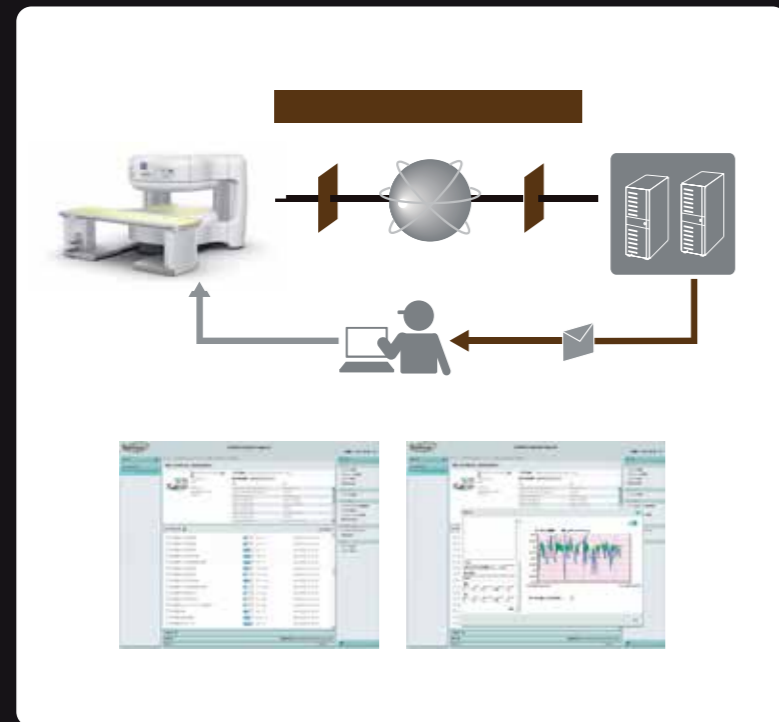
With more than 6'800 MRI systems sold worldwide since the launch of its first model back in 1983, Hitachi, as a leading MRI manufacturer contributes to the progress in MR imaging.

* Source: Factory shipment record of Hitachi

Sentinel* Customer Support for AIRIS Light

AIRIS Light is compatible with Hitachi's customer support system, Sentinel*. Sentinel is a system which monitors the operational status of your MRI to support stable and efficient use. AIRIS Light is able to capture information about its operational status, which is subsequently sent to and archived in the Sentinel server at Hitachi. If an abnormality is detected, a notifying e-mail is sent to the service staff to prompt appropriate action. The long-term operational status can be chronologically organised for ease of use.

* Users are required to set up their network environment to make it compatible with Sentinel. The contents of the service may vary depending on the content of contractual coverage.



Sample Layout



AIRIS Light

Brings you to a new field.



- "AIRIS", "Sentinel", "VASC" and "FatSep" are registered trademarks or trademarks of Hitachi Ltd..
- Specifications and physical appearance may change without prior notice.
- We request you to refer to the "operation manual" and the related documents for appropriate use of this product.

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