GENERAL CATALOGUE

2016 Hitachi, Ltd. Healthcare Business Unit
All descriptions in this brochure confirm to the Pharmaceutical and Medical Device Act in Japan as well as other laws and regulations in Japan. Model names, specifications and configurations of products in overseas market outside Japan may be different by the countries. For inquiries, please contact us.

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This Brochure is made based on as of our WEB 2016/10/01.
ECHELON OVAL

The **New Shape** of MRI

ECHELON OVAL is designed around the shape of the human body, allowing for an optimal patient experience with outstanding comfort, space, and efficiency. The game-changing 74cm oval bore is wider than ever. Enhanced patient accessibility combined with Hitachi’s Workflow Integrated Technology (WIT), advanced imaging capabilities, and Customer Support, makes ECHELON OVAL an ideal solution for improved workflow, greater diagnostic confidence, and increased cost-efficiencies.

ECHELON OVAL, the innovation that’s changing the shape of MRI.

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ECHELON

Promising MRI to meet your expectation

ECHELON further advances magnetic resonance scanning technologies by providing faster operation and clearer imaging, making diagnosis easy. In response to the needs of the medical community, ECHELON provides true practicality and ease of use.

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Hitachi, Ltd. Healthcare Business Unit
MR Imaging System

APERTO Lucent
This is the only Hitachi open MRI with a single pillar structure, which provides wider openness. It has a design that takes examinees into consideration. For Hitachi, the design is also an important specification for an MRI system. APERTO Lucent can be incorporated with measurement functions newly developed by Hitachi for the high magnetic field system, which widens the possibility of diagnostic imaging.

AIRIS Vento
An improved operability to make a wide variety of information available. High-precision images of a one step higher level. A friendly design with more comfort. This compact system has condensed “gentleness” of MRI with all functions such as operability, image quality, and comfort necessary for improved MRI. Another new value of the open MRI is created here.

Comparison: AIRIS Vento vs. Supercon MRI
Cumulative cost for 5 years (Electricity/liquid helium)

<table>
<thead>
<tr>
<th>Year</th>
<th>Open MRI</th>
<th>Supercon MRI</th>
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<tr>
<td>1st year</td>
<td>$X</td>
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<td>2nd year</td>
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AIRIS Vento does not require the cost of helium.

AIRIS Light
AIRIS Light is the state-of-the-art Open MRI which features not only easy operation with its laterally aligned table and sitting flexibility with its compact design, but also a wide variety of imaging techniques (advanced imaging technologies) to expand diagnostic capabilities.
CT System

SCENARIA

Wish to scan a wide area in short amount of time and obtain images with high precision – there had been many technical obstacles to achieve this, such as the resolution degradation in the periphery of FOV due to the high-speed rotation of the scanner.

Our high-speed data sampling technologies realized 0.35s/rot scanning which can be used not only for cardiac scanning but also whole-body scanning for SCENARIA.

In order to fully answer the needs of the patient, the operator and the doctor, image quality, workflow and user-friendliness have been refined.

Hitachi aims for an all-round CT with absolutely no room for compromise.

64ch/128slice CT ~ SCENARIA ~ is reborn.

Supria 64

Full time submillimeter scan. The value of 64ch CT does not come from the ability to perform cardiac scans but the capability to scan submillimeter with high-definition for all parts of the body.

"Absolute diagnosability", "high-throughput", "excellent operation", "patient friendly", "effective setting that utilizes existing facility", "high profitability that supports hospital management"...

Make this new concept 64ch CT your new standard, which aims to overcome these problems.

Supria

The needs for faster and more accurate diagnosis are increasing every day in the front-line of medical practice. Supria is designed to answer in one CT all the demands for various routine applications, compact size, useful results and ease of use without any compromise. Supria 16ch CT is your answer to take off to the next clinical and technology standard.

Open & Compact

75cm wide gantry bore with compact foot-print.
Digital R/F System with FPD

EXAVISTA
Multi-Purpose R/F Table System

Original Symmetrical Design of Hitachi with Oblique Arm, Table Tilt and Wide Scanning Stroke offers stress free experience during clinical procedures. In addition, the table top lowers to 48cm from floor for easy patient transfer to the table. The system is offered with Flat Panel Detector in selectable sizes of 17inch x 17inch (approximately 43cm x 43cm), 40cm x 30cm, or 30cm x 30cm.

FAiCE-V NEXT STAGE1

Hitachi’s next generation image processing technology, “FAiCE-V”, increases both contrast and sharpness of fluoroscopic images while reducing noise and after-image. Experience high clarity for routine and interventional radiology (IVR) applications and improved real-time processing.

- MTNR [Motion Tracking Noise Reduction]
- M-DRC [Dynamic Range Compression]
- FRC* [Frame Rate Conversion]
- HyperVIEW®
- FluoroSHOT®
- Dose SR®

Optional

- Detailed Fluoroscopy®
- Pulsed Fluoroscopy
- Image Stitching®
- FOV Selection
- SEC
- Multi-Modality Image Display
- Multi-Operation
- FluoroRECORD®
- DRC®

- Dynamic Range Compression
- Real-time Split Radiography
- Smart Exposure Control
- Dynamic γ Processing
- Dynamic Shading Correction
- 12bit Contrast Resolution
- Parallel Processing

Hitachi, Ltd. Healthcare Business Unit
General Radiography System

Radnext 50  Radnext 32

General Radiography System

Hitachi has cultivated radiography systems for nearly half a century with “Radnext” series being the most recent and popular system of our radiography systems. It comes with our original inverter type of X-ray high-voltage generators in 50, or 32kW. A rich variety of combinations allows coping with many clinical requirements.

Mobile X-Ray System

Sirius Starmobile tiara

“Sirius Starmobile tiara” is Hitachi’s brand new digital mobile X-ray system with a compact body and Pantographic Arm, which were inherited from “Sirius series” developed by Hitachi for more than a half century. Pantographic arm is a combination of a long arm and a slim support pillar, which allows you to position the X-ray tube anywhere with great ease. As for images, you can select from 3 sized of wireless FPDs. Images can be easily checked on site. (Variations of Sirius Starmobile tiara are also introduced.)
Diagnostic Ultrasound System

ARIOETTA 70/S70/V70

ARIOETTA 70 is a high-performance diagnostic ultrasound system exclusively focused on the creation of high quality “sound” using Symphonic Technology - a combination of developments that include raw materials for the probe, design of the front-end and back-end as well as the display monitor. Versatile functions such as Real-time Virtual Sonography (RVS) where volume data from CT/MRI/US is fused with high resolution real-time ultrasound images, and Real-time Tissue Elastography (RTE) that visualizes the stiffness of tissue in real time can be incorporated.

● Shear Wave Measurement (SWM)
  SWM incorporates a reliability indicator, VsN, from which the precision and reproducibility of the median shear wave speed measurement can be assessed. Combination use of SWM and RTE is now achievable with one transducer, to gain a better understanding of the clinical condition of the liver.

● 3D Sim-Navigator
  In addition to Real-time Virtual Sonography (RVS), the 3D Sim-Navigator simulates needle placement in fusion imaging mode. The positional relationship of multiple needles used for ablation treatment can be assessed using the 3D body mark created from the virtual CT or MR volume data.

ARIOETTA 60/S60/V60

The “Usability” of ARIETTA 60, designed in the pursuit of comfort. High-performance features normally reserved for high-end models are integrated into this compact system which is ergonomically designed to allow the examiner to scan in comfort irrespective of the type of patient or clinical examination. With large casters and almost 25% lighter in weight than conventional systems (Hitachi’s in-house comparison), the ARIETTA 60 can be moved around with little effort. A large palm rest is provided centrally to give optimum wrist support during examinations. To complement the high-definition image quality, a broad range of transducers and advanced functionality offer increased diagnostic confidence. For example, Dual Gate Doppler allows observation of Doppler waveforms from two sample points simultaneously and 3D/4D functionality can be incorporated.
### ARIETTA Precision

ARIETTA Precision, a diagnostic ultrasound system with unprecedented style, is sure to fulfill your requirements. Designed to fit into a confined space, and with an image quality that will not disappoint. ARIETTA Precision will satisfy all users with its simple operation and effortless mobility. The layout of ARIETTA Precision can be customized to fit the user’s environment.

### ARIETTA Prologue

ARIETTA Prologue is compact and useful even in limited spaces or situations, such as at the bed side of consultation rooms and wards, emergency cases and treatment rooms. Even with its compact housing, ARIETTA Prologue uses the same image processing technologies normally reserved for high-end systems.
Diagnostic Ultrasound System

HI VISION Ascendus
We have attained a new level of development to meet the endless demand for high quality imaging. The HI VISION Ascendus is filled with a full range of advanced technologies developed by joining forces of the Hitachi Group. ULTRA BE II, the second generation of ultrasound broadband engine, realized unprecedented high quality imaging performance. The ULTRA BE II allows for various new functions including 4D Elastography.

HI VISION Preirus
The HI VISION Preirus is a compact premium class ultrasound scanner with brand new platform. In addition to the further improvement of technologies like Real-time Tissue Elastography and Real-time Virtual Sonography, this system realizes basic performance required to ultrasound systems in higher level than ever before. For higher image quality, Pure Image, beautiful and clear image is achieved. For higher operationality, its ergonomic design and the touch panel incorporated in the image monitor offer a comfortable operation.

HI VISION Avius
Diagnostic ultrasound system “HI VISION Avius” equipped with Hitachi's latest digital technologies realizes high-definition ultrasound beam forming and advanced image processing. Especially, it compactly integrates high-quality imaging functions such as the 3rd generation tissue harmonic function (HDTHI), adaptive imaging function (HI REZ) and so on. The HI VISION Avius can also incorporate Real-time Tissue Elastography.
Diagnostic Ultrasound System

ProSound F75 Premier CV

What is the role of ultrasound in cardiovascular imaging? ProSound F75 Premier CV has been developed with that basic question in mind. Equipped with well researched specifications and usability for both routine examination as well as advanced research. ProSound F75 Premier CV is born to fulfill various cardiovascular specialty requirements.

ProSound F75 Premier

Offering excellent diagnosable images for a wide variety of clinical applications, the ProSound F75 Premier is “FIT” for comfortable and efficient ultrasound examinations.

- Facilitate Workflow
  The system allows you to adjust for the best positions of the monitor and operation panel for each examiner.

- Investment Return
  Various ways to minimize costs have been devised in all 3 phases of introduction, during use and after use.

- True Diagnostics
  The images with high diagnostic ability will lead to confident judgments.
Diagnostic Ultrasound System

**ProSound α7**

The ProSound α7 is a ultrasound system that contradicts the thought that high-performance systems are large. It inherits the proven technologies and functions of our high-end product, yet offers outstanding mobility for daily clinical use. The system is easily transported to deliver high performance throughout the hospital.

**ProSound α6**

The ProSound α6 is the next generation compact color ultrasound system providing unprecedented performance in a variety of ultrasound applications. It inherits the proven technologies and functions of high-performance higher class models. The compact and lightweight system is easily transported and occupies only a small footprint.

**Noblus**

With Noblus, a flexible style system that fits well with various clinical scenes by combining the main body of a notebook PC style US system with a mounting cart was realized. The mounted battery and wireless DICOM compatibility allows the system to round smoothly. In addition, the clear image quality by UltraBE (Ultrasound Broad band Engine), the digital signal processing circuit, together with the Elastography that provides visually the information of the hardness, thus offering a full range of functions.
Diagnostic Ultrasound System

F37
Thoroughly simple and compact. The F37 is full of functional and ergonomic features for simple operation. Imaging functions inherited from higher-class models support F37’s excellent patient care. The equipped, enhanced, and evolutionary 3E Platform enables the small size, as well as faster processing, lower power consumption, and future upgradeability.

F31
A compact system with outstanding performance, for a wide range of clinical applications.
F31 is developed with the purpose of providing what is necessary for natural and comfortable examinations.

ProSound 6
Backed by the proven technologies of the ProSound series which are reputed for excellent image quality, the ProSound 6 supports high-level echo examination setting the new standard in its class. The system is slim enough for use in a limited space, such as an outpatient consulting room, the bedside in the ward, an operating room, etc.

ProSound 2
The ProSound 2 has been developed to meet the demand for high image quality in a portable unit. In features user-friendly simple operation with a variety of probes, making it ideal for today’s increasingly diverse examination environment thanks to its enhanced flexibility and ingenuity.
Bone Densitometry System

**AOS-100E EggQus**

Bones, which are the base of healthy life, have been drawing attention around the world today. As a pioneer and leader of diagnostic ultrasound systems, we have developed a bone densitometry system with a new approach. It is created through the concept of an “eggshell,” a shape bone in nature. Simply beautiful. Stronger, more lightweight, easier to handle. All of these for maximum portability.

Hitachi’s “EggQus” is the “Egg of Columbus” of quantitative ultrasound systems.

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**AOS-100SA**

Use environments for bone densitometry systems are diverse. AOS-100SA is a system reliable in each environment, daily examinations to screenings, from the elderly to children, regardless of environment temperature.
Bone Densitometry System

DCS-600EXV

DCS-600EXV is DXA based system which measures forearm (radius) BMD. The bone in the forearm (radius) has minimum aging deformation, and is therefore suitable for elderly BMD diagnosis. Diaphysis (filled with cortical bone) and Distal Radius (filled with spongy bone) can be scanned in one scan.

DCS-900FX

A compact system with reliable technologies and outstanding usability - this was our aim for development of the X-ray Bone Densitometry System DCS-900FX.


DCS-900FX is our answer obtained after continuous pursuit of more comfortable examination, for both examiner and examinee.
Optical Topography

ETG-4000

Hitachi Optical Topography system measures and images dynamically the hemoglobin levels in the brain during functional activity using near-infrared spectroscopy (NIRS).

Measurement of this system is non-invasive, and relatively restraint-free and convenient for the patient being tested.

The system beams near-infrared light into patient's head, and pick up the reflected light penetrating through the cerebral cortex. It opens up a totally new way of assessing the brain.

Options

• 3D topographic image display system
• Interface for the video recording system
• 3×11(52-channel) holder
• Neonate/infant probe

3×11(52-channel) holder and 3D display function are optional.

• Simultaneous 24 or 48-channel measurements
• Clinic-conscious with three types of holders
  Stable measurements are possible using a cap that fixes the holders.
• Operator-friendly
• Compact and mobile
• Improved S/N ratio with shortened wavelength
  Use of 695 nm wavelength

Hitachi, Ltd. Healthcare Business Unit
Particle Therapy System

The world’s most advanced cancer centers have chosen Hitachi’s proton therapy system, having been designed with leading edge technology while being able to accommodate the various needs of its diverse clinical partners. Respiration-gated Irradiation, Spot Scanning Technology and Real-time image Gated Proton Beam Therapy (RGPT*1) are just some of the innovations Hitachi has helped commercialize. Hitachi’s Proton Therapy system is in clinical use at 3 locations in Japan and 4 locations in the United States*2 including MD Anderson Cancer Center, where it treats patients for over 16 hours per day while achieving a 98% system availability.

360 degree compact gantry room

Single gantry room

Multi-gantry room

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*1 RGPT is granted by the Japan Society for the Promotion of Science (JSPS) through the "Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST Program)," initiated by the Council for Science and Technology Policy (CSTP).

*2 As of August 2016

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