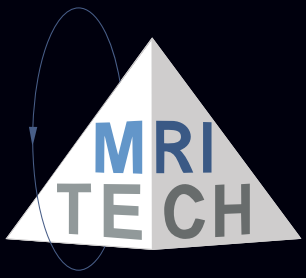
Cirrus 0.2T



MRI for Everyone

North America, Asia, Europe

contact: kturek@mri-tech.pl

MRI-TECH inc.

Cirrus

MRI system for all your needs:

- Low costs
- Low maintenance
- High quality
- Open geometry
- Imaging of all body parts
- Remote diagnosis
- Flexible patient positioning
- All imaging techniques
- Patient friendly
- Easy to operate
- Easy to install
- Minimum site requirements

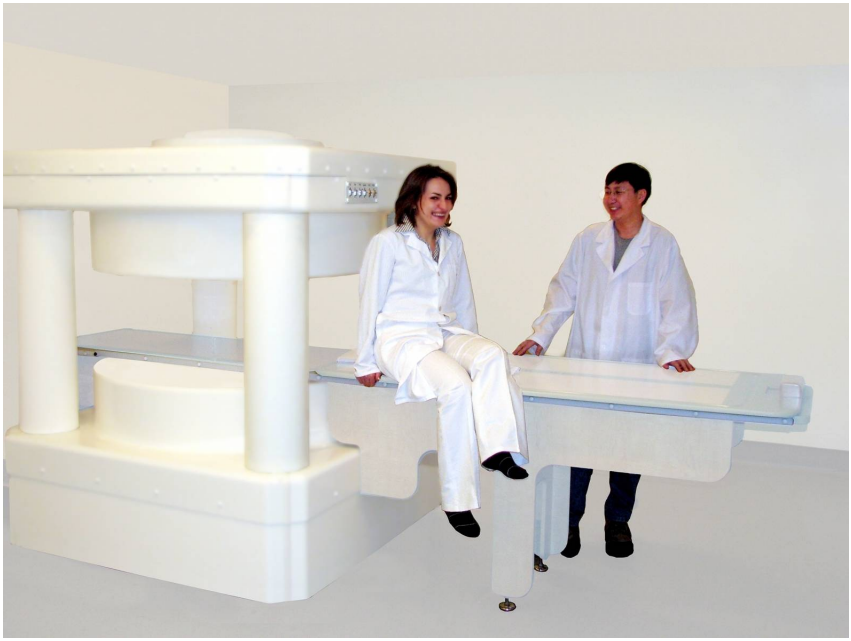
Canada:
Vancouver,
Winnipeg,
Calgary

Cirrus 0.2T

Based on the technology developed at the National Research Council of Canada, Institute for Biodiagnostics MRI-TECH has constructed a low-field high performance Magnetic Resonance Imaging system, **Cirrus 0.2T**.

The **Cirrus** is a low-maintenance, low-cost, high image-quality MRI system.

The company obtained FDA approval for human applications of the system in April 2009.



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Cirrus MR imaging system is based on a 4-post open magnet. Its large 42cm vertical working space combined with the open configuration allows for flexible positioning from all four directions. This configuration is ideal for applications that require easy access and good visibility of the subject.

The system embodies all of the latest MR-related technology innovations providing high quality images at the low field. It is the new generation of MR scanners; easy to operate and maintain while remaining affordable and easily accessible.

Cirrus 0.2T

Cirrus components:

The MRI system is comprised of a 0.2T permanent magnet, a console, gradient coils, radio frequency (RF) coils and an MR compatible table.

The MRI system allows 2D and 3D data acquisition. The data is reconstructed into images that are displayed and manipulated with the user interface. The system allows DICOM printing to film or Windows printer.

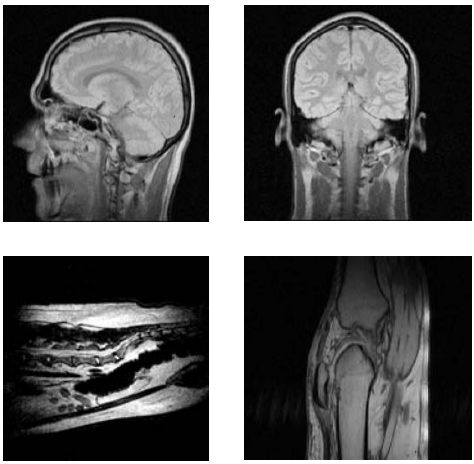
The user interface and software are Windows-based. It is very user friendly and requires only basic computer knowledge to operate. The user interface also provides a pulse sequence diagram, patient registration, scan protocol library, scan parameter editor, scan control, image processing and display.

Full technical support is available including remote system error monitoring, repair and maintenance.

MRI-TECH inc.

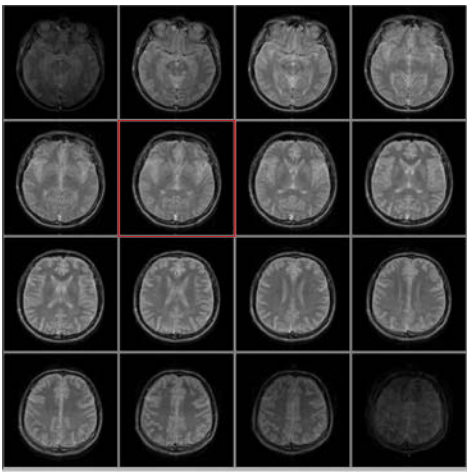
Cirrus allows MR imaging of all body parts:

- Head
- Neck
- Chest
- Abdomen
- Breast
- Knee
- Shoulder
- Elbow



Specialized optional packages can be provided for imaging of other parts of the body, for example:

- Eyes
- Nose
- Ovaries
- Prostate



3D FSE, partition 4mm, ETL 8, 256x192x16

Cirrus 0.2T

Technical specification

Magnet room:

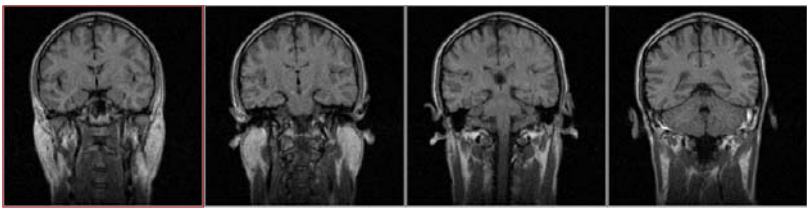
- Minimum room size (W x L x H): 4 x 6 x 3m
- Rf shielding: minimum 90 dB (<20MHz)
- Stable temperature (21°C ±0.5)
- Electrical service (110V) wall outlets all through power filters

Equipment room:

- Standard computer room air environment for equipment room
- 208 V, 3 phase delta, 30 amps max, 60 Hz, 10 kVA (4693 VA average, 7890 VA peak)
- 120 V single phase, 5 amps
- 208 V single phase, 12 amps max, <1500 VA
- Communication lines: phone and network

Observation room:

- Communication lines: phone and network
- 1 phase, 60 Hz, 110V, 15 Amp



IR SE, 256x256, FOV 250mm

MRI-TECH inc.

Technical specification

Magnet:

- 0.2T open 4-post
- Homogeneity better than 30ppm (p-p) over 35cm
- Weight: 12 metric tones
- External dimensions (W x L x H): 1.4 x 1.4 x 1.4m

Gradient and rf system:

- Max strength: 20mT/m
- Rise time: 0.4 ms (0-20mT/m)
- Slew rate: 40 T/m/s
- Rf amplifier: 3kW
- Rf receiver: 2-channels, digital quadrature detection, 400 kHz (max)
- Automatic coil recognition
- Gradient pre-emphasis: digital

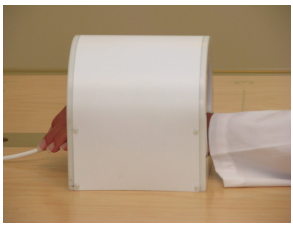
Rf coils:

- Head
- Knee
- Cervical spine
- Shoulder
- Hand/wrist
- Breast

Cirrus 0.2T

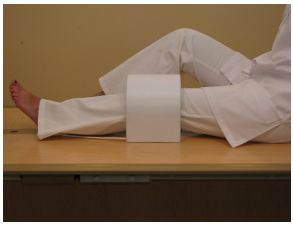
Technical specification // graphical user interface

Imaging capabilities:



- Minimum slice thickness: 5 mm
- Max matrix: 512×512
- Partial FT
- All slice orientations (steps of 1°)
- 2D slices and 3D partitions: 32 (256×256)
- FOV: 10 – 40cm
- Slice gap: arbitrary

Image processing:



- Rotation, pan and zoom
- Profiling
- 3D rendering
- Phase correction
- Image algebra (linear combination)
- Geometric measurements
- ROI statistics
- T1/T2, ADC quantification

Other features:

- Printing to DICOM compatible printer
- Remote assistance over Internet

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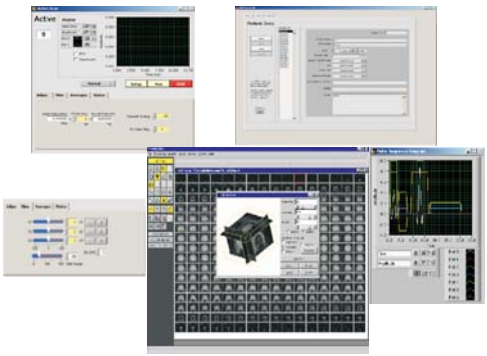
Technical specification

Computer and software:

- PC: Intel dual-core 2 GHz CPU, 2GB memory, 300 GB HD
- OS: Windows XP SP3
- Monitor: 22" wide-screen LCD, 1680×1050 resolution
- Archiving system: DVD writer

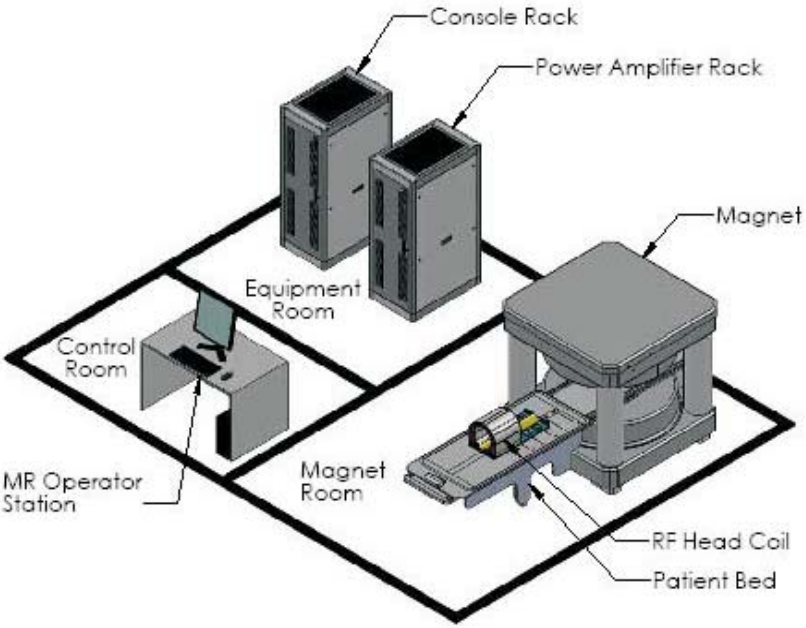
Imaging sequences:

- SE (2D, ME, Diffusion Weighted)
- IR (GRE & SE)
- GRE (2D & 3D)
- FLAIR
- FSE (2D & 3D)
- SSFP
- MT (GRE & SE)
- Fat suppression
- Driven equilibrium FT (2D & 3D)
- Localizer (2D GRE sequence for slice positioning)



Cirrus 0.2T

System installation layout:



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