

# MRI System

# MrT 3300

## Technical Specifications

### MrJ 3300 - Magnet

- |                            |                              |
|----------------------------|------------------------------|
| <b>Field Strength</b>      | <b>0.32 T +/- 5%</b>         |
| • Type                     | Permanent                    |
| • Gradient Strength - Max  | 22 mT/m                      |
| • Slew Rate - Max          | 44 mT/m/ms                   |
| • Gradient Rise Time - Min | 0.5 msec from 0 to +/-22mT/m |

### MrJ 3300 - RF System

#### Digital Spectrometer

MrJ 3300 is equipped with an innovative MRI **digital spectrometer** that can manage **up to 8 receiving channels** (expandable to 16) MrJ 3300 provides **multi-array** receiving coils with **MAX** technology (Multi Array Cross Tuned).

- |                     |               |                                 |
|---------------------|---------------|---------------------------------|
| <b>RF Amplifier</b> | Max. RF Power | 3.0kW                           |
|                     | Preamplifiers | integrated in the magnetic unit |

#### Extremity Coils

- Multi Array (MAX)
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- Flat linear coil

#### Clinical applications

- Shoulder
- Knee - Ankle
- Hand - Wrist - Elbow
- Hip

#### Spine Coils

- MAX L-Spine large
- MAX L-Spine small
- MAX C-Spine

#### Clinical applications

- Lumbar Spine
- Lumbar Spine
- Cervical Spine

#### Optional Coils

- TMJ
- Knee Large
- GP solenoidal

#### Clinical applications

- Temporo Mandibular Joint
- Knee
- General purpose

### MrJ 3300 - Patient Handling

#### Ergonomics

The patient table - rail mounted - can slide into the magnet with a smooth and effortless movement.

- |                        |        |
|------------------------|--------|
| • Net Patient Space:   | 34 cm  |
| • Table Length:        | 240 cm |
| • Max. Patient Weight: | 200 kg |

#### Patient positioning

- LED centering device
- Flash Localizer System (FLS) - images are continuously acquired and displayed in real time

### MrJ 3300 - Pulse Sequences

- Spin Echo T1 e T2 (SE T1, SE T2)
- Double Echo (DE)
- Inversion Recovery (IR)
- Fast Inversion Recovery (FIR)
- Fluid Attenuated Inversion Recovery (FLAIR T1)
- Fluid Attenuated Inversion Recovery (FLAIR T2)
- Short TI Inversion Recovery (STIR)
- Echo Reduced Acquisition Spin Echo (ERASE)
- Gradient Field Echo 2D e 3D (GFE, 3D GFE)
- Rapid Imaging Spin Echo/Double Echo (RISE, RIDE)
- Short TI Inversion Recovery GFE (STIR GFE)
- FAST-RISE echo train length 5, 7, 9 (ETL 5, ETL 7, ETL 9)
- 3D Spoiled Gradient Field Echo (3D SPGFE)
- 3D Time Reversed Gradient Field Echo (3D EMIT)
- 3D Gradient Balanced Steady State (3D GBASS)
- Fat-Water separation T1 (FWS T1)
- 3D Stimulated Steady State (STSS)

### MrJ 3300 - Imaging Techniques

Acquisition **Matrix 2D** from **128 x 128** to **512 x 512**  
 Acquisition **Matrix 3D** from **128 x 128 x 24** to **256 x 256 x 128**  
 Visualized **FOV** up to **260 mm**  
 Number of Slices up to **64**

Artifact Suppression • **Flow compensation**  
 • **Oversampling**  
 • **ABS** (Automatic Backfolding Suppression)  
 • **Reduced FOV**

Imaging modalities • **Half Scan**  
 • **Half Echo**

### MrJ 3300 - Siting Requirements

MRJ 3300 can be installed in a 4m x 4m room with an entire system footprint of just **16m<sup>2</sup>**.

• Weight 9200 Kg

Floor reinforcement might be required depending on building conditions and floor load capacity.

• Power Requirement single phase 230 VAC 50Hz (USA 110 VAC 60Hz)  
 • Power Consumption **4 KVA** (0.8 KVA on stand-by)

Customer to provide cabling, interface devices, and network connection, telephone, high speed Internet connection (ADSL or modem) for Remote Diagnostics Assistance

### RF Shielding

A Faraday cage is required to provide the necessary RF shielding.

- Minimum attenuation: 80 dB
- Minimum dimensions: 3m x 3m x 2.31m (height) footprint 9m<sup>2</sup>
- Suggested configuration: 3m x 4m x 2.31m (height) footprint 12m<sup>2</sup>

