

GE Signa HDxt 1.5T Site Layout and Planning Guide

The GE Signa HDxt 1.5T MRI system is a widely used imaging solution known for its high-definition imaging capabilities and patient-friendly design. For comprehensive site planning and installation, it's essential to consider various specifications and requirements.

Site Planning Resources

GE Healthcare provides detailed site planning guides for the Signa HDxt 1.5T MRI system. These guides include information on room layouts, equipment placement, and infrastructure requirements. For mobile installations, AGITO Medical offers a Site Planning Guide for the GE Signa HDxt 1.5T Optima Edition (HD23), which details specifications for mobile MRI trailers.

Key Room Specifications

- Minimum Room Size: Approximately 30 m² (323 sq. ft.)
- System Length: Approximately 150 cm (59 inches)
- Magnet Length: Approximately 150 cm (59 inches)
- System Weight: Approximately 5,500 kg (12,125 lbs)
- Bore Size: 60 cm

Power & Cooling Requirements

- Electrical Supply:
 - Line Voltage: 380/400/420 V or 440/480 V
 - Frequency: 50/60 Hz
 - Power Consumption: Up to 91 kVA
- Cooling System:
 - Heat Dissipation to Water: Approximately 60 kW
 - Water Flow Rate: 120 liters/min
 - Water Supply Temperature: 19–22°C
 - Water Quality: De-ionized water with 35–40% ethylene glycol antifreeze

Magnetic Fringe Field Considerations

The magnetic fringe field extends beyond the magnet and must be considered for safety and equipment placement:

- 0.5 mT (5 Gauss) Line:
 - X-axis: 2.5 m
 - Y-axis: 2.5 m
 - Z-axis: 4.0 m
- 0.1 mT (1 Gauss) Line:
 - X-axis: 3.5 m
 - Y-axis: 3.5 m
 - Z-axis: 5.5 m

Installation & Structural Requirements

- Transport Openings:
 - Ceiling: Minimum 240 cm × 240 cm
 - Wall: Minimum 240 cm × 240 cm
- Floor Loading: The floor must support the system's weight, including the magnet and additional components.

For a comprehensive overview and detailed planning, refer to the GE Signa HDxt 1.5T Optima Edition (HD23) Site Planning Guide.