

Technical Information



14.1T preclinical MRI scanner

Bruker

Location address:

EPFL AVP CP CIBM AIT CH F0-595

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Description

Ultra-high magnetic field and ultra-strong gradients preclinical system, opening the way for high spatial resolution MRI, exquisite functional and diffusion contrasts, and high resolution spectroscopy.

26 cm horizontal bore animal MR scanner (one of four comparable magnets in the world), complemented with a full suite of animal physiology support for anesthesia and surgical preparation, as well as bench experiments.

Specifications

- **Magnet:** Magnex Scientific 14.1 Tesla / 260mm Bore, 120 mm Inner Diameter. Nb3Sn superconductive coil in pumped He bath (60 mB, 2,2 K)
- **Cryostat length:** 2830 mm
- **Cryostat diameter:** 1820 mm
- **Cryostat weight (excluding cryogens):** 13 Tonnes approx.
- **Nominal operating current:** 250.8 Amps
- **Energy stored:** 31.1 MJ
- **Gradient system:** 1 T/m strength at 6000 T/m/s

Additional related infrastructure

- Animal preparation and surgery room, proximity of CIBM MRI EPFL animalerie

Software:

- Bruker Paravision 360