

Main commercial instruments adopted for survey or personal monitoring in MRI environments

Type of device (example)	Type of exposure assessment in MRI	Type of measured field	Measurement range	Measurement methodology	Sensor	Measurement error	Size
Magnetic field monitor (HI-3550, Bell 4048)	SMF exposure	SMF and ELF (50/60 Hz) magnetic fields	0.1 mT to 0.3 T	Personal monitoring (instantaneous and time integrated field measurements)	Tri-axial Hall sensor	<10%	Small
Field analyzer system (EFA-3)	ELF MF exposure	Magnetic and electric fields (5 Hz-30 kHz)	5 nT to 10 mT 0.1 V/m to 100 kV/m	Personal monitoring	Built-in three-dimensional magnetic-field probe and the external E-field probe	<10%	Medium
Three-axis hall magnetometer (THM1176)	SMF exposure	Magnetic field from DC to 1kHz	up to 14 T	Personal and survey monitoring	Tri-axial Hall sensor	<1%	Small
Exposure level tester (Narda ELT-400, Narda EHP-50E)	GMF exposure	Magnetic field (1Hz-400Hz)	up to 70 mT	Survey measurement (RMS, peak value and WP)	Isotropic	<4%	Medium
EMF Measurement System (TS-EMF, Narda SRM 3006, Narda EMR-300)	RF exposure	EMF (9kHz-6GHz)	1 mV/m to 100 V/m	Survey measurement (spectrum analysis)	Isotropic	<4dB	Medium-Large
Personal dosimeter (Talete, Mafiss)	SMF exposure	Magnetic field	up to 7 T	Personal monitoring (instantaneous and time-averaged)	Tri-axial Hall sensor	n.a.	Small (wearable)
Personal Dosimeter (MrDose, Magnetic Dosimeter)	SMF and motion-induced EMFs	Magnetic field and dB/dt	n.a.	Personal monitoring	Tri-axial Hall sensor / induction coils	n.a.	Small (wearable)