

Appendix C

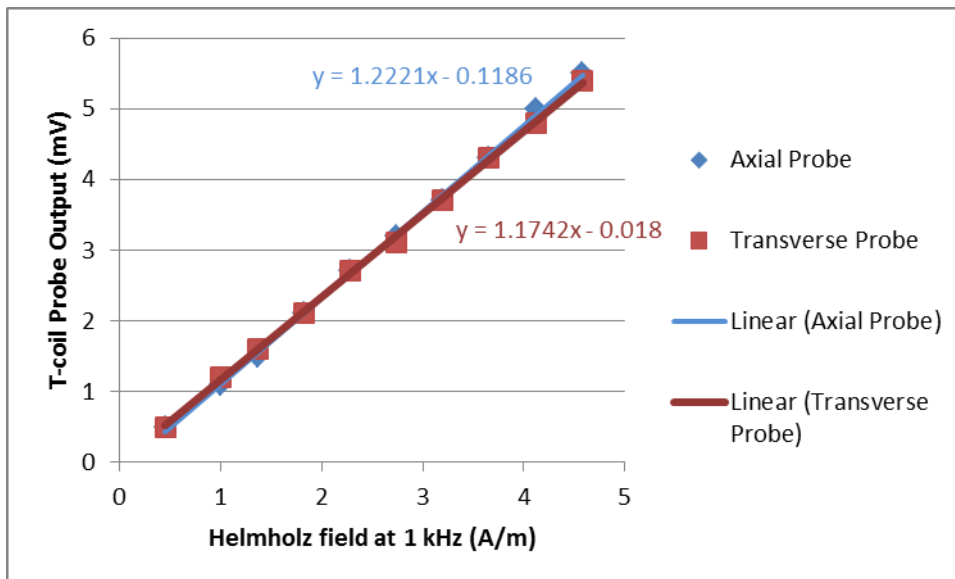
Test Equipment

SAR2 Lab

Instrument description	Supplier / Manufacturer	Model	Serial No.	Calibration (date)	Calibration Due (date)
Bench top Robot	Mitsubishi supplied by IndexSAR	RV-E2	EA1030108	N/A	N/A
Software	IndexSAR	SARA2_HAC v.1.1.3	N/A	N/A	N/A
Axial T-Coil Probe	IndexSAR	IXP-100	T0005	2005-12-21, 2013-03-20	N/A
Transverse T-Coil Probe	IndexSAR	IXP-110	T0006	2005-12-21, 2013-03-20	N/A
Digital Multimeter	Klein Tools	MM200	0710X-A1	2011-05-02	2013-05-02
Preamplifier	ARTcessories	MicroMIX	N/A	N/A	N/A
Waveform Generator	Agilent	33220A	MY43004303	N/A	N/A
Digital Equalizer	Phonic	i SupraCurve	OIA0D20168	N/A	N/A
100 ohm resistor block	IndexSAR	N/A	N/A	N/A	N/A
Helmholtz Coil	IndexSAR	IXT-020	0004	N/A	N/A
FoS Meter	IndexSAR	IXHM-010	0003	N/A	N/A
Probe Amplifier	IndexSAR	IXA-020	0072	N/A	N/A
Audio Analyzer	Rohde & Schwarz	UPL 16	838205/005	May 2011	May 2013
Digital Radio Comm. Tester	Rohde&Schwarz	CMU200	110229	May 2011	May 2013

Probe Sensitivity / Linearity Check

The probe sensitivity / linearity check was performed on March 20, 2013

**Equipment Calibration Documents:**

*Attached:
Probe Calibration Report*



Report No SN T0005/6
21st December 2005

INDEXSAR
Axial and Transverse T-coil probes
-
Calibration Report



**Indexsar, Oakfield House, Cudworth Lane,
Newdigate, Surrey RH5 5BG. UK.**
Tel: +44 (0) 1306 632870 Fax: +44 (0) 1306 631834
e-mail: enquiries@indexsar.com

Calibration method

Two T-coil probes have been calibrated using a Helmholtz coil at a frequency of 1kHz. From these measurements, the sensitivity and linearity of response have been determined.

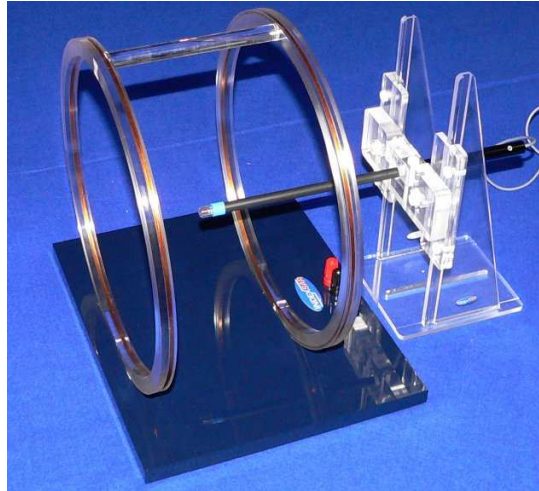


Figure 1. T-coil probe centred in Helmholtz coil

T-coil probe construction

The construction of the transverse T-coil is illustrated in Fig. 2. The distance between the tip and the nearest active element of the probe is 1.5mm. The same value applies for the axial probe.

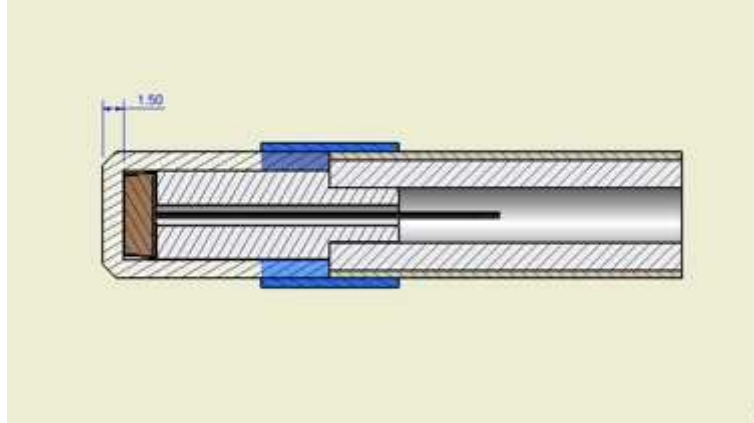


Figure 2. T-coil probe construction detail

Equipment used for calibration

The following equipment was used for the calibration measurements

Instrument description	Supplier / Manufacturer	Model	Serial No.
Helmholtz coil	Indexsar	IXT-020	S/N 0001
100 ohm resistor block	Indexsar	N/A	(measured at 99.8 ohms)
Function generator	Thurlby Thandar	TTi TG315	232010
Digital voltmeter	Wavetek	DM27	60506583

Sensitivity and linearity measurements

The output of each probe was measured in millivolts over a range of H-fields established by the Helmholtz coil at 1kHz. The results are shown below.

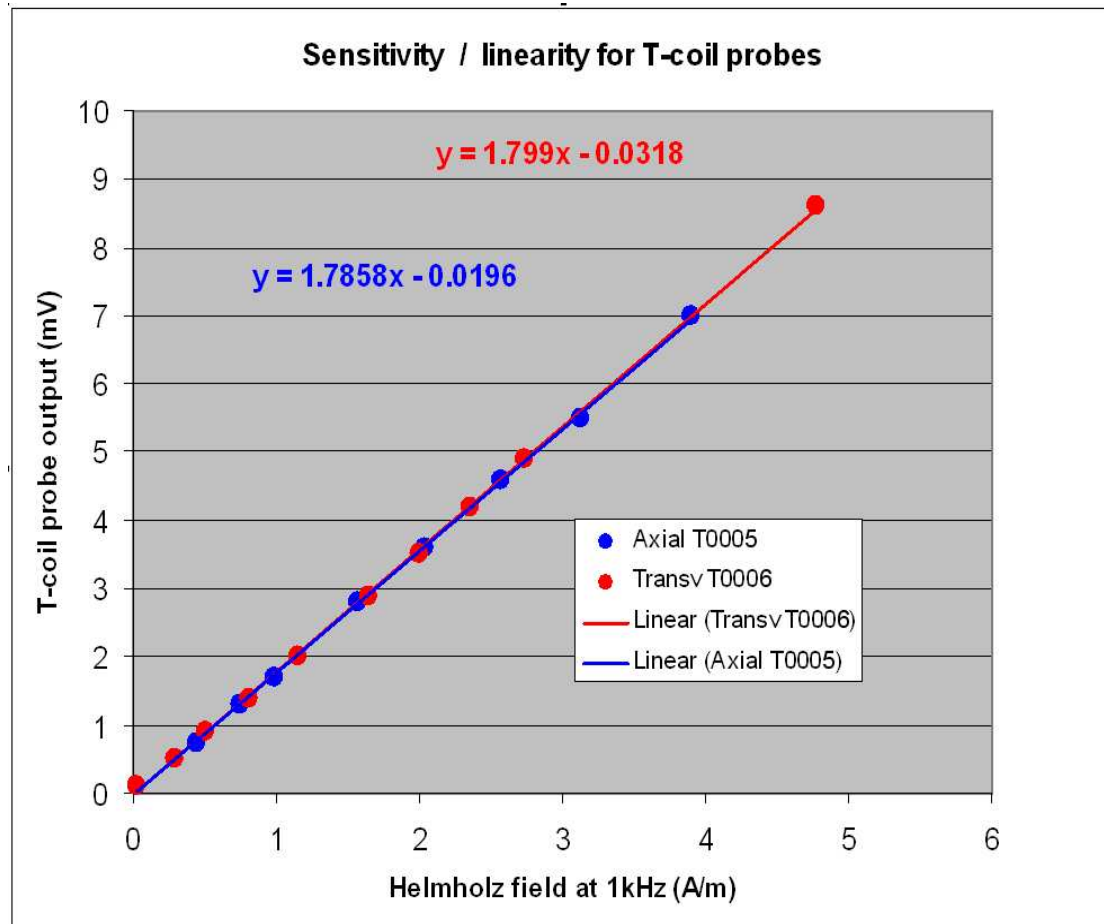


Figure 3. T-coil probe outputs versus H-field at 1kHz

Probe Characteristics

The following Table summarises the results of the probe characterizations

Parameter	Transverse probe (S/N T0006)	Axial probe (S/N T0005)	Units
Sensitivity at 1 kHz	1.799	1.786	mV per A/m
Sensitivity at 1 kHz	-57.45	-57.48	dBm/(A/m)
Tip offset to nearest part of coil	1.5	1.5	mm
Linearity versus field strength	See Figure 3	See Figure 3	-
DC resistance	3140	3120	ohms