

Near Field Probe Set

NFPS1

- Locate emission "hot-spots"
- Check on mechanical screening performance
- Isolate faulty components

Applications

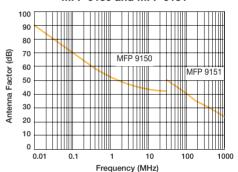
- Shielded effectiveness comparisons
- Radiated field predictions
- Localised immunity tests on cables and components
- Diagnose poor bonding

A diagnostic "tool kit" for use in both electrical and mechanical environments featuring 3 hand held probes (two magnetic, one electric) covering the frequency range 9kHz - 1GHz together with a 30dB pre-amplifier, power adaptor and check jig. When used in conjunction with a spectrum analyser or measuring receiver, the probes will readily locate and qualify sources of EMI (electromagnetic interference).

The two magnetic probes incorporate a high degree of rejection of both stray and direct electric fields - a frequent cause of measurement error - providing far greater repeatability than with conventional loop field probes. The electric probe with built-in pre-amplifier is powered by the CPS 9753 power supply unit (supplied) via the CPS 9752 power adaptor.



Typical Conversion Factor MFP 9150 and MFP 9151



Technical Specifications	
MFP 9150	Magnetic Field Probe
Specified frequency range	9kHz - 30MHz
Connector	50Ω SMA Female
Max. RF power input	0.5 Watt
Size (Incl. RF connector)	256 x 38 x 18mm
Operating temperature	0 - 45°C
MFP 9151	Magnetic Field Probe
Specified frequency range	30MHz - 1GHz
Connector	50Ω SMA Female
Max. RF power input	0.25 Watt
Size (Incl. RF connector)	256 x 38 x 18mm
Operating temperature	0 - 45°C
FP 9152	Electric Field Probe
Frequency range (±3dB)	9kHz - 1GHz
Antenna factor	67dB[(mV/m) /mV]
Connector	SMA Female
Size (Incl RF connector)	267 x 38 x 18mm
PCJ 9251	Check Jig
Connector	N (Male)
Impedance	50Ω
Max. RF power input	+20dBm

	NFPS1
CPA 9231A	Pre-amplifier
Frequency range	9kHz - 2GHz
Noise figure	≤ 4dB
Input connector	N (Female)
Output connector	N (Male)
Gain	30dB ± 2dB at 1GHz
	18dB at 2GHz
Input/ output impedance	50Ω
Input VSWR	< 2:1
Power requirements	15V ± 10% DC or
(With probe)	10V ± 0.1V DC at 100mA
CPS 9752	Power Adaptor
Power requirements	$15V \pm 1.5V dc$
(With probe)	or $10V \pm 0.1V$ dc
RF input connector	BNC (Female)
RF output connector	N (Male)
Size (Incl. RF connectors)	103 x 26 x 27mm