

It helps in understanding of electromagnetic emission and get first-hand experience with real-world compliance problems and tools. It contains everything a student needs to start learning Electromagnetic Compliance. It contains the near-field probes for electric and magnetic Fields, an EM demo board shows multiple electrical and magnetic field problems found in many products.

Probes identify and evaluate signal integrity problems in high-speed circuits and can differentiate electric and magnetic fields. Low noise amplifier increases the sensitivity of CRO. EMC analyser can identify and locate signals in a broad frequency range.

Features:

- * To measure effectiveness of a shielding material
- * To locate source of emissions of pcb tracks
- * To demonstrate effectiveness of a Ferrite as a HF suppressor
- * To measure induction into conductors
- * To analyse tracking currents on a conducting plane
- * To estimate cross talk on PCB
- * Use of preamplifier to increase sensitivity of a CRO
- * Use of EMC analyser / detectors for radiated and conducted emissions testing.

1. Near Field Magnetic probe M1



Type: Loop
Sensor: Magnetic Field
Rejection E/H: 40dB
Frequency: 800MHz upper resonant
Sensitivity: High
Diameter: 6cm

5. Near Field Electric probe E2



Type: Narrow Directioal
Sensor: Electric Field
Rejection H/E: 30dB
Frequency: 3GHz upper resonant
Sensitivity: Low
Size: 0.6cm

2. Near Field Magnetic probe M2



Type: Loop
Sensor: Magnetic Field
Rejection E/H: 30dB
Frequency: 1.5GHz upper resonant
Sensitivity: High
Diameter: 3cm

6. Low Noise Preamplifier



Frequency Range: 9KHz-4GHz
Noise figure: 3dB
Gain: 40dB
Compression 1dB: 10dBm

3. Near Field Magnetic probe M3



Type: Loop
Sensor: Magnetic Field
Rejection E/H: 10dB
Frequency: 2.5GHz upper resonant
Sensitivity: Low
Diameter: 1cm

7. Emissions Reference Source¹



Frequency: 10-4000 MHz
Harmonic Spacing: 10 MHz /50 MHz
Frequency Stability: 100ppm
Impedance: 50 Ohms
RF level at 3m: 40 - 80 dBuV/m
Radiant Field polarisation: Vertical and Horizontal

4. Near Field Electric probe E1



Type: Omni Directioal
Sensor: Electric Field
Rejection H/E: 30dB
Frequency: 1GHz upper resonant
Sensitivity: High
Diameter: 3.6cm

8. EMC Analyser



Frequency: 1-500MHz
Resolution: 100KHz 4 digit LED display
Range: -100dBm - +10dBm
Noise Figure: 4dB
Input Impedance: 50 Ohms (SMA)
CRO Output: Linear X, Log Y out (BNC)

Mfd by: Amitec Electronics Ltd.

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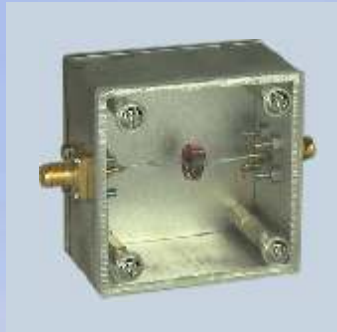


9. LF/HF Electromagnetic Detector



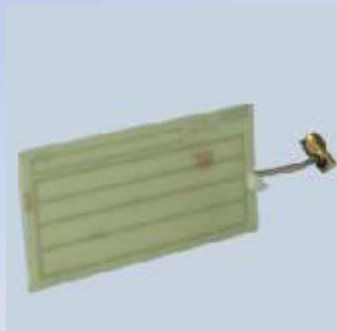
Measuring range -70dBm to +15dBm
 Resolution: 0.1dB
 Frequency Range: 10kHz-50MHz
 Accuracy: 2dB
 Input: SMA
 Impedance: 50 Ohms
 Input SWR: 1.2

10. Ferrite Suppressor



Ferrite Suppressors

11. EM Demo Kit



SMPS, EM demo board

12. Microstrip Log Periodic Antenna



S11: >10dB
 Bandwidth: 1500 ± 500 MHz
 Gain: 6dBi
 Beamwidth : E plane 60°
 Beamwidth : H Plane 80°
 Polarisation : Linear
 Front to Back Ratio: 6dB
 Connector : SMA

13. Biconical Antenna



S11: >10dB
 Bandwidth: 600 ± 300 MHz
 Gain: 2dBi
 Beamwidth : E plane 60°
 Beamwidth : H Plane 180°
 Polarisation : Linear
 Front to Back Ratio: 0dB
 Connector : SMA

14. Antenna Magnetic Loop



Frequency: 9KHz-30MHz
 Diameter : 300mm
 Connector : SMA
 Inductance: 1uH
 Turns: Multi

15. Log Periodic Antenna



S11: >10dB
 Bandwidth: 600 ± 300 MHz
 Gain: 4dBi
 Beamwidth : E plane 60°
 Beamwidth : H Plane 80°
 Polarisation : Linear
 Front to Back Ratio: >6dB
 Connector : SMA

16. Shielded can



Shielded Cans

17. Attenuator



Attenuation: 40dB
 Connector : SMA
 Impedance: 50 Ohms

18. Accessories



Ferrite suppressor, EMI EMC design software, SMA-SMA RG 316 cables, SMA Adapters

E Manual- Installation Video ease of learning

Dimensions: 55 X 45 x 36cms;
 Weight : 20Kg.

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