

EMScanner



High speed real-time EMC/EMI Diagnostic tool

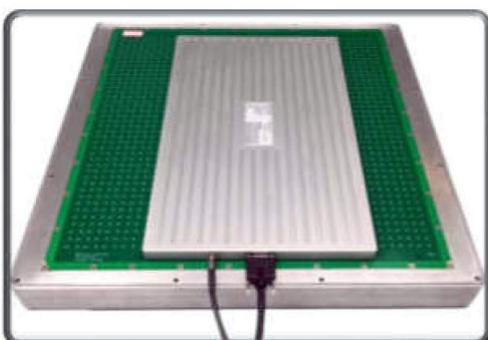
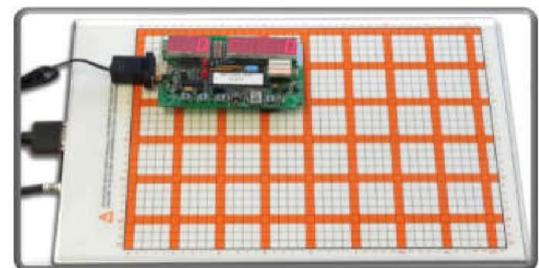
EMScanner is a very-near-field scanning system. It is composed of 1,218 H-field probes that operate between 150 kHz and 8 GHz. Probes are wideband but not very sensitive across this band thus they are very good at rejecting background noise.

EMScanner does not require a special setup like a shielded room; the Device Under Test (DUT) may sometimes however pick up strong ambient signals like those present in the cell band (850 MHz -2100 MHz) or radio FM band.

It is strongly suggested to measure the ambient noise in the test environment before running any scans with EMxpert. First power off the DUT, start the EMxpert software and then setup a Spectral Scan for the bandwidth of interest. Run the Spectral Scan and analyze the test results. If there is any ambient noise being displayed the EMScanner comparison features will allow you to filter it from the actual DUT test results.

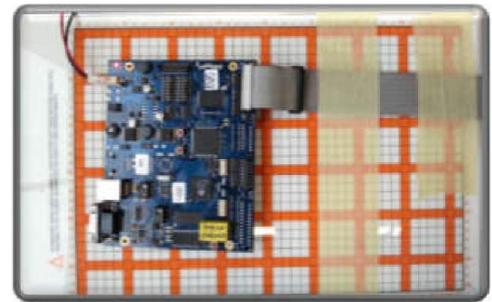
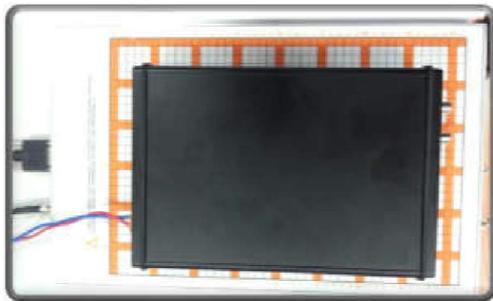
Modes of operation

PCB testing (smaller than the scan area): Place the PCB directly anywhere on the grid of the scanner. If there are tall components that prevent the PCB from touching the surface of the scanner, use of an LNA is strongly suggested. If the other side of the PCB does not have any high components, you should scan this side.



PCB testing (larger than the scan area): You can take snapshots of the DUT by using the scanner like a hand-held probe. You can either move the scanner over the DUT or vice versa. Scan one area on the PCB and then move the scanner to the next position.

Cable testing: Cables from and to the PCB can be tested for emissions. Place the DUT on the scanner and tape the cables on the scanner or simply tape only the cables on the scanner.



System testing: EMScanner will help detect any leakages from a system under test for both frequency and location.

In situ testing: EMScanner is light and compact. The bottom part of EMScanner is made of anodized aluminium making it non-conductive. Care must be taken to not pierce the anodized surface since the underlying aluminium is conductive.

The Scanner can easily be placed in a rack-mount system to test the PCBs in their working environment. A mechanical arm may be required to fix the scanner for ease of testing.



Scientech Technologies is a world leading developer of FAST magnetic very-near-field measurement technologies and applications, providing real-time test solutions to antenna and PCB designers and verification engineers, without the need for a chamber. The EMScanner is a compact EMC and EMI diagnostic tool. Scientech Technologies solutions dramatically increase designer productivity and substantially reduce time-to-market and project development costs.

