



CHAMBERS ON YOUR DESKTOP



The ERX+ and spatial scan result of a solid state hard drive at 166.028 MHz and 0.12 mm resolution

EMxpert™

I was very impressed with the capability of the EMxpert. The EMxpert tool allowed us to perform spatial analysis and locate the site in a single day. The tool is effective and can save weeks of time and effort!

Director of Applications Support at Leading Semiconductor Manufacturer

The EMxpert is an EMC and EMI pre-compliance and diagnostic tool enabling Designers to rapidly identify and solve EMC and EMI problems in a single design cycle in their own lab environment. With the EMxpert, unexpected compliance test results can be avoided altogether.

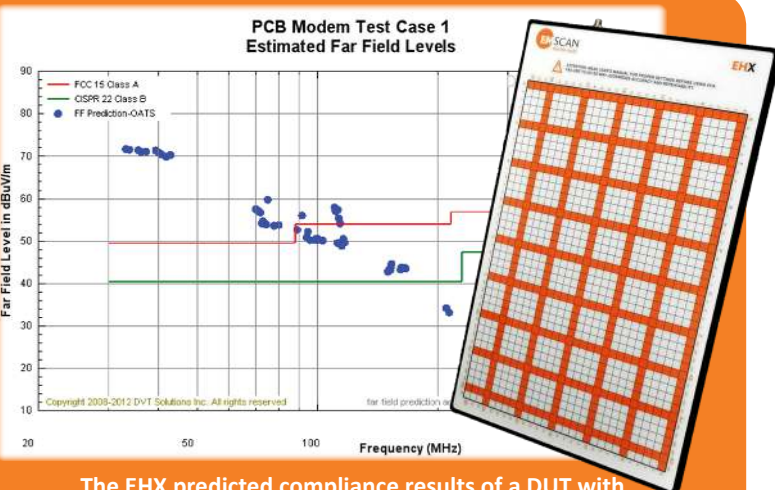
The EMxpert costs a fraction of an anechoic chamber and allows you to quickly and easily:

- Analyze high speed / high power PCB designs
- Visualize the root causes of potential EMC and EMI problems
- Find, characterize, and address unintended radiators or RF leakage
- Analyze high density / high complexity PCB designs
- Pinpoint the cause of a design failure even when the problem is intermittent
- Prototype, test, and optimize new designs, forms and components
- Resolve EMC and EMI problems early in the design cycle
- Display NFC antenna emissions

TEST RESULTS IN SECONDS

SIGNIFICANT TIME-TO-MARKET ACCELERATION

COMPACT & TABLETOP



The EHx predicted compliance results of a DUT with FCC 15 Class A and CISPR 22 Class B limit lines

APPLICATIONS

- Filtering
- Shielding
- Immunity
- Signal integrity
- Common mode
- Broadband noise
- NFC antenna testing
- Current distributions
- Emissions along traces
- Incoming quality control
- Material properties scanning
- Manufacturing quality control
- Absorber effectiveness testing
- Production unit vs. golden standard
- Self-interference or desense problems
- Manufacturing problem troubleshooting

RFxpert™

I prefer to use the RFxpert for my antenna design projects instead of simulation software. In a couple of hours, I can model a real antenna out of copper and test it with the RFxpert in the antenna's intended operating environment. I then use the proven design, based on the RFxpert analysis, to prepare a CAD drawing and send it off to manufacturing for prototyping.

RF Network & Antenna Engineer at Leading M2M Manufacturer

The RFxpert is an antenna measurement tool that enables Antenna Engineers to quickly evaluate and optimize designs at their desk by providing over-the-air real-time performance results for antennas and wireless devices.

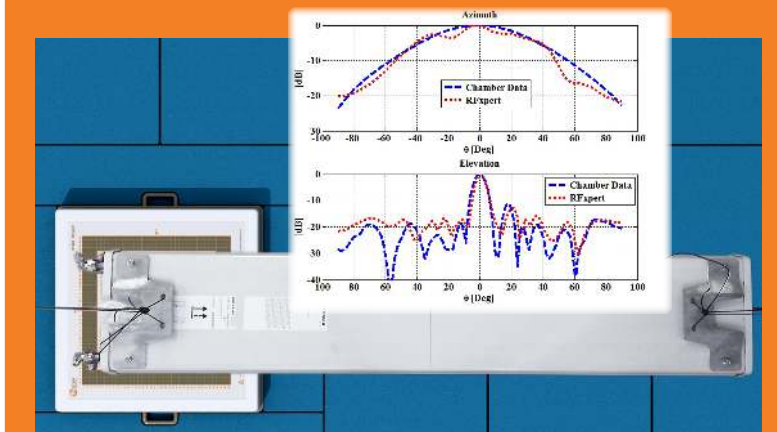
The RFxpert works without the need for an anechoic chamber and allows you to quickly and easily:

- Analyze your embedded antenna and wireless device designs
- Prototype / test new designs, components, and forms
- Iteratively test and optimize embedded antenna designs
- Perform highly repeatable and rapid over-the-air wireless device measurements
- Verify final product performance in real-time
- Gain immediate insight into the root causes of performance issues by analyzing the near-field results

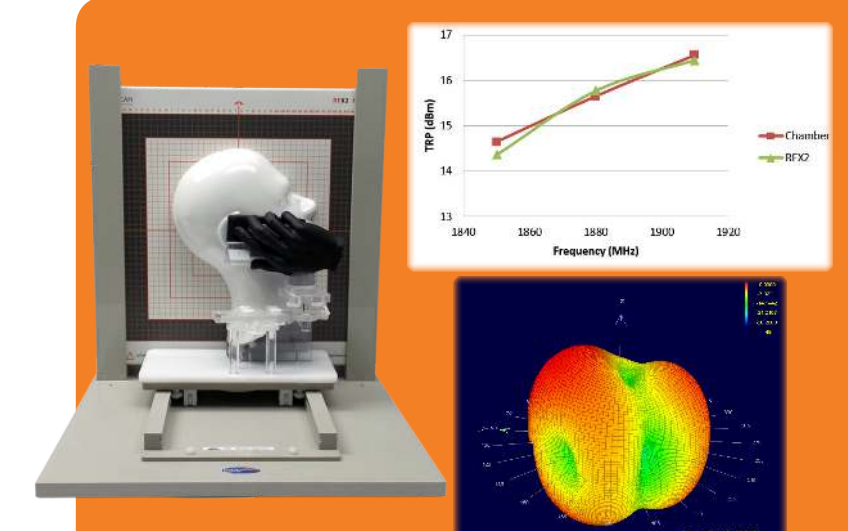
EASY TO USE

DRAMATIC INCREASE IN PRODUCTIVITY

SUBSTANTIAL COST REDUCTION



Radiation pattern of a base station antenna tested on the RFX2 with the MCP Jig vs. chamber results at 1950 MHz



TRP and far-field pattern of a smartphone tested on the RFX2 with the OTA Phantom Fixture vs. chamber results

APPLICATIONS

- GPS
- WiFi
- RFID
- M2M
- Cellular
- Smart meters
- Sample lot testing
- Automated testing
- Stand-alone antenna
- Base station antenna
- Phased array antenna
- OTA production testing
- Production quality testing
- On-site testing of phase center
- On-site diagnostic of large radars

COST EFFECTIVE PREPARATION TO COMPLIANCE WITH EMSCAN'S PATENTED VERY-NEAR-FIELD TECHNIQUES

EMSCAN has provided patented very-near-field magnetic scanning equipment to Design, Verification, and Compliance Engineers since 1989.

The need for reliable systems to measure both antenna radiation characteristics and printed circuit board emissions is well established. The growing presence of wireless and electronic applications across a broad array of industries has created a high demand for effective and economically sound solutions.

Unfortunately, the CAPEX, OPEX, and physical real estate requirements associated with conventional chamber systems have historically made this difficult to achieve. Additionally, conventional chamber solutions do not offer many of the important advantages of very-near-field scanning techniques for antennas, printed circuit boards, and other radiating sources. Key advantages of very-near-field techniques include:

- Mapping surface emissions of PCBs and antennas
- Faster measurements
- Low real estate requirements
- Rapid design iteration, prototyping and optimization
- Integration of design and manufacturing measurements

CONTACT US TODAY TO ARRANGE FOR A FREE DEMONSTRATION

www.emscan.com

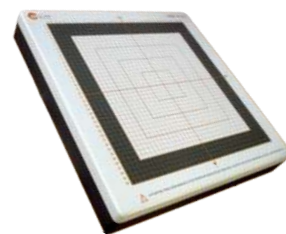
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RFxpert™



RFX2™

RFX™

FEATURES		
Frequency range	300 MHz - 6 GHz	300 MHz - 6 GHz
Maximum radiator size	L 232 cm x W 232 cm (L 91.34" x W 91.34")*	L 16 cm x W 10 cm (L 6.30" x W 3.94")
Plug 'n play	●	●
2D and 3D near-field patterns (amplitude, phase and polarization)	●	●
Far-field patterns and bi-sections (cartesian and polar)	●	●
EIRP and TRP	●	●
Graph S_{11}	●	●
Calculate gain and efficiency	●	●
OPTIONS		
Circular polarization	●	●
Base station emulator programmable control	●	●
OTA phantom head+hand test kit	●	○
* MCP jig to test large antennas	●	○

We are proud to have hundreds of customers across several industries.

Here are just a few RFxpert customers: http://www.emscan.com/rfexpert/RFX_customers.cfm

EMxpert™



ERX+™

EHx+™

EHx™

FEATURES			
Frequency range	150 kHz - 8 GHz	150 kHz - 8 GHz	150 kHz - 8 GHz
Scan area	L 31.6 cm x W 21.8 cm (L 12.44" x W 8.58")	L 31.6 cm x W 21.8 cm (L 12.44" x W 8.58")	L 31.6 cm x W 21.8 cm (L 12.44" x W 8.58")
Spatial resolution	0.12 mm	7.50 mm	7.50 mm
Maximum radiated power load	10 W / 40 dBm	10 W / 40 dBm	10 W / 40 dBm
Plug 'n play	●	●	○
Embedded spectrum analyzer	●	●	○
OPTIONS			
Far-field application	●	●	●

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