The Revolutionary EMC Immunity Test Solution

Compact · Efficient · Scalable

The patented RadiField® Triple A is a revolutionary new product causing a paradigm shift in the world of EMC immunity testing. The RadiField® system involves a combination of high level integration and a lossless field combining technique, making several discrete components like combiners, couplers, power meters and cabling superfluous.

Conventional testing

Conventional immunity testing systems involve a broadband amplifier, including inefficient internal combiner, directional coupler, two RF power meters and interconnecting cables. The efficiency of such setup is poor due to power loss in the combiners and both the internal and external cabling.

Eliminate loss

By removing all components that cause the power loss and integrating all the other components into one single instrument, all these unwanted power losses are eliminated. The low power RF carrier signal is transmitted in a lossless fashion over the standard coaxial cable.

Active Antenna Array

At the same time the RadiField® makes use of the field combining technology of an Active Antenna Array. Integrated amplifiers are directly connected to the same number of integrated antennas making a discrete inefficient combiner superfluous. Instead of combining power, the RadiField® combines field.

Low Cost of Ownership

The new RadiField® Triple A is not only cost effective due to its much lower price but also due to its easy installation, low power consumption, less mechanical wear and tear of cables and connectors and even more important, lower calibration cost. All these aspects result in a substantially lower cost of ownership of this immunity system.

RadiCentre Integration

The RadiField® Triple A is easily integrated with a modular RadiCentre® EMC test system. The mainframe contains the RadiSupply® plug-in card which powers the RadiField® over the standard coaxial cable running from the RadiCentre® to the RadiField®. This same cable is used to drive the carrier signal and to provide bidirectional communication with the RadiField® unit. The RF signal may be generated by any external RF signal generator covering a frequency range up to 18 GHz. Finally, the control of the automated H/V positionar is arranged over the same coaxial cable if the RadiField® is used with the RTW2000A mast.

Broad Range, High Field!

The RadiField® Triple A model RFS2018B covers a frequency range from 6 GHz to 18 GHz and can generate a field strength up to 75 V/m at 1 meter test distance, as required by Military- and/or Aerospace standards. The RadiField® Triple A range of models covers frequencies ranging from 800 MHz up to 18 GHz and the advantage of the technology used is the opportunity to upgrade your system to higher field levels.

WAVECONTROL · Pallars 65-71 · 08018 BARCELONA · Tel. 933208055 · www.wavecontrol.com/testsystems

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RadiField® Triple A®

Technical Specifications

Performance	RFS2018B
Frequency range	6 GHz - 18 GHz
Maximum field @ 1 meter	75 V/m
Imput connector	N- Type
Max. input power to reach max. Field	0 dBm
Harmonic Surpression	12 dBc (minimum, 2nd harmonic) 16 dBc
Number of internal power meters	2 (Forward & Reflected)
Power meter type	Integrated RadiPower
Directional Coupler	Integrated

Safety	
Safety circuit	Safe start & shutdown
Cable (dis)connect	Intrinsically safe
Voltage	< 50 VDC (Safe Voltage)
Interlock	Hardware interlock

Connections	
Tri-pod mount	1/4-20 inch UNC thread
Antenna mast mount (optional)	22 mm Ø stinger boom
Antenna mast mount (optional)	40 mm Ø stinger boom

Dimensions	
Length	860 mm
Width x Height	250 mm x 250 mm
Weight	11 kg

Environmental conditions	
Temperature range	10 ˚C - 40 ˚C
Relative humidity	10% - 90% (non-condensing)

Power consumption	
Supply voltage	115 VAC / 230 VAC
Power consumption	< 400 W, 350 W typical
Warranty	3 years (molest excluded)

RadiField - September 2017 - version 1.1 | Specifications are subjected to change without notice.

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