

# RF IMMUNITY TEST SYSTEMS

## Complete systems for IEC61000-4-3 testing

- ▼ Fully integrated systems for RF radiated tests. Full compliance to IEC standards.
- ▼ Save time and costs during product development phase. Be assured of compliance when project completed!
- ▼ Self test/self-certify = fastest route to market
- ▼ Range covers everything from controllers to chambers, sensors to software.



The Laplace range of RF immunity test systems provides the user with a complete integrated system for the compliance testing of products to international RF immunity standards.

The range includes:

- ▼ Control/synthesisers
- ▼ Power amplifiers
- ▼ Switching units
- ▼ Field sensors
- ▼ Antennas
- ▼ Windows software
- ▼ Compact test cells
- ▼ Anechoic chambers

Each item is available either individually or as part of an integrated system.

**COMPREHENSIVE** The range permits testing from 30MHz to 3GHz, up to 40V/m in either compact test cells or compact chambers. EUT size is limited only by the size of chamber you specify.

**COMPLIANCE** The elements in this range are designed for IEC61000-4-3 compliance. Signal sources feature the required modulation and frequency range and the software fully implements the necessary test techniques.

**INTEGRATION** The Laplace range simply plug together with a common Windows software package providing all the control, monitoring and recording functions

**SIMPLICITY** These systems are renowned for ease of operation. The software is outstanding in terms of flexibility and intuitive user interface.

Photograph shows a complete automated 30MHz—2GHz immunity test system with RF2000, RF1100, RF1200 and LETIS plus SA1000 emissions analyser. Nose of Lc300/2 test cell to right of photo.

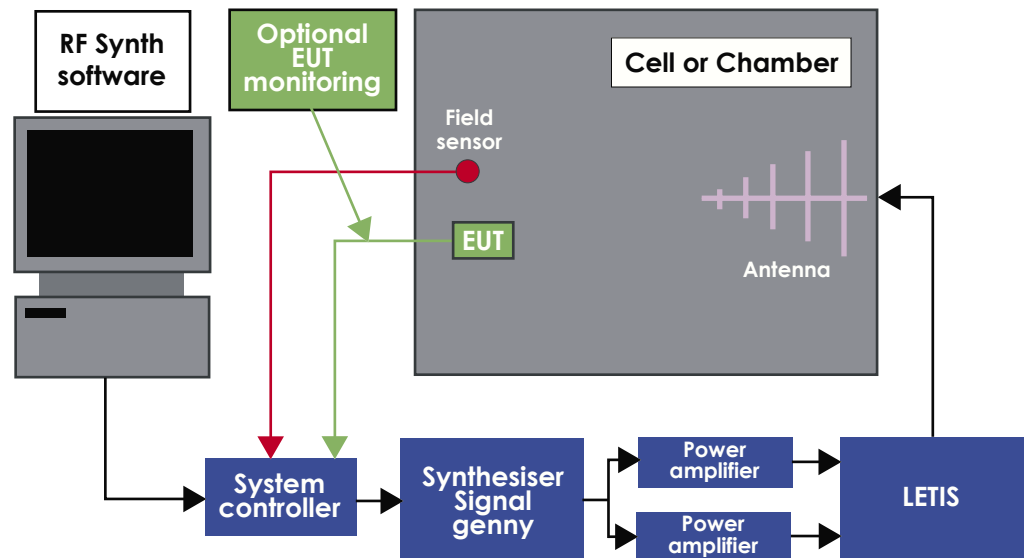


## RF immunity testing to IEC61000-4-3

This type of testing requires several different resources as shown on the diagram.....

- A test cell or chamber
- A system controller
- A signal generator
- A power amplifier
- A power amplifier switch unit
- An antenna
- A field sensor
- Ideally, some EUT monitoring.
- And Windows software to run everything!

Laplace can supply all these items as an integrated 'ready-to-run system, or individual items to match your existing resources.



### The range

Item	Model ref.	Summary specification	Notes
<b>Test cell or Chamber</b>	Lc 300/2	30MHz-3GHz EUT size 30cm cube	Note that the Lcxxx test cells incorporate the sensor and antenna and comply with IEC61000-4-20
	Lc600	30MHz-3GHz EUT size 60cm cube	
	Compact chamber	3m test distance SAC or FAC, high performance chamber	
<b>System controller and synthesiser</b> (Combined into one unit)	RF1000	30MHz - 1GHz	Compliant with IEC61000-4-3. Includes EUT monitoring features.
	RF 2000	30MHz - 2.4GHz	
	RF 3000	30MHz - 3GHz	
<b>Field sensor</b> (Not required for Lc300/2 or Lc600)	RFP-04ce	Includes 10m fibre optic cable and serial interface.	Requires - RH option on RF1000 or RF2000 or RF3000
<b>Power amplifier</b>	RF1100	24W, 30MHz - 1GHz	See separate brochure for field strength performance in the various cells/chambers
	RF1170	70W, 30MHz - 1GHz	
	RF1200	12W 0.8GHz - 2GHz	
	RF1240	40W, 0.8GHz - 2GHz	
	RF1300	8W, 0.8GHz - 3GHz	
<b>Switch unit</b>	LETIS	Automatic switching of PA connections	Avoides tedious changing of cables at 1GHz
<b>Antenna</b>	RF200	30MHz - 1GHz	Not required for Lc300/2 or Lc600
	RF230	1GHz - 3GHz	

### Software

Software is at the heart of any EMC test system. The Laplace RFSynth software is a fully integrated Windows compliant package. It directly controls all the items highlighted in red via a USB port on the host PC. Complete flexibility as regards test technique, test sequencing and test parameters is offered. Full display of test results, including achieved field strength and EUT status.

### Cells and Chambers

For smaller products, Laplace offers the LaplaCell range of test cells. These compact cells offer the ultimate in convenience whilst maintaining compliance with IEC61000-4-3.

For products larger than 60cm cube, compact 3m test chambers can be supplied. These high performance chambers are available in SAC and FAC format and include full installation and calibration.

### Finally

The Laplace range is fully supported worldwide. Helplines and lifetime software support are included for all our customers.

Available from:



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