RF POWER AMPLIFIERS

RF0250
RF11xx
RF13xx
RF16xx

Specifically designed for EMC/EMI RF compliance testing

- Linear,distortion free performance
- Wide choice of power outputs
- Coverage from 100KHz to 6GHz.
- Compact and cost effective.
- 100% mismatch tolerance
- Solid state technology

The Laplace range of RF power amplifiers are compact, air-cooled standardised units. They are solid state, linear, high reliability amplifiers with an exceptional in-service record. They are all fit and forget units which feature 0dBm input for maximum output, fixed gain, good linearity and impulse characteristics and excellent reliability.

They are ideal for immunity testing to IEC61000-4-3 and IEC61000-4-6.

Photograph shows an RF1100, 24W 30 to 1000MHz power amplifier

Comprehensive The Laplace range of power amplifiers cover a wide range of applications, from 8W to 70W and from 100KHz to 6GHz.

Compliance All Laplace power amplifiers are designed to deliver IEC-compliant signals over the full range of power output with low distortion and good pulse characteristics

Protection Output circuits fully protected against overload and poor VSWR conditions. External 'standby mode' input for extra protection when used with software driven test systems such as the Laplace 'RFSynth' program.

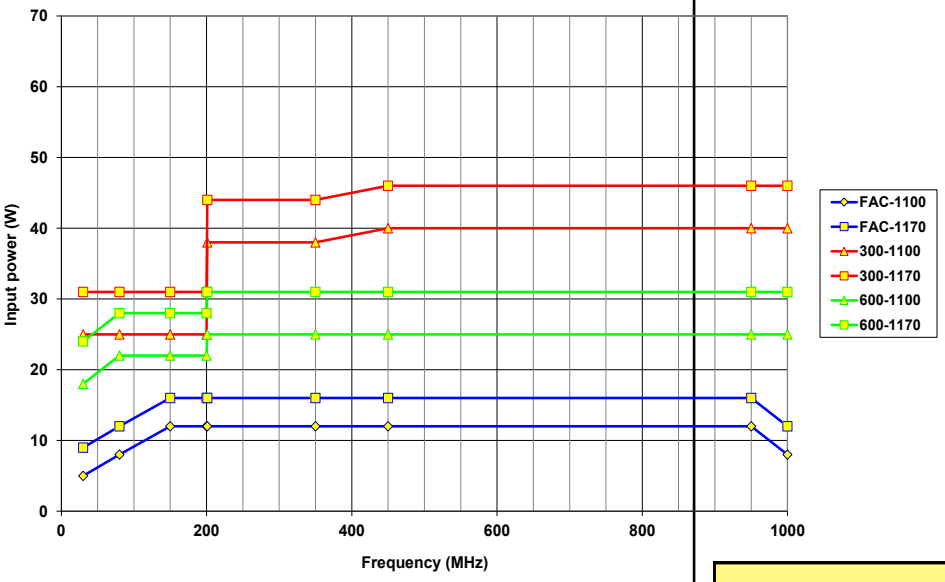
Compact and Convenient Laplace power amplifiers represent the most compact amplifiers currently on the market. They have a simple fixed gain, signal-in, power-out operation. All are rated for full power at 0dBm input.

LAPLACE INSTRUMENTS LTD

RF Power Amplifiers - the range…...

Model	Frequency range	Power rating (max)	Power rating (1dB Comp)	Small Signal Gain	Size W x H x D mm	Weight kg
RF0250	100KHz-250MHz	25W	15W	46dB	300 x 105 x 240	6
RF1100	30—1000MHz	24W	13W	46dB	300 x 105 x 240	6
RF1170	30—1000MHz	70W	40W	49dB	482 x 133 x 500	22
RF1300	0.8—3GHz	8W	5W	40dB	300 x 105 x 240	6
RF1330	0.8—3GHz	25W	15W	46dB	482 x 133 x 500	22
RF1600	1GHz—6GHz	10W	8W	41dB	300 x 105 x 240	6

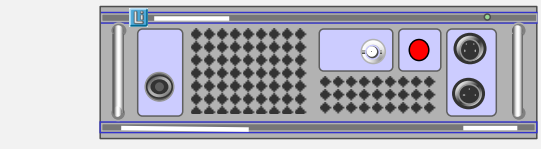
Actual typical performance—field strength in typical IEC61000-4-3 applications.



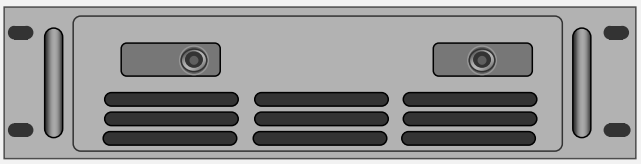
The graph shows actual field strengths achieved in three types of test facility with two of the above amplifiers.

FAC: Fully anechoic chamber (3m chamber) with standard Bilog antenna.
300: Laplace Lc300 test cell
600: Laplace Lc600 test cell.

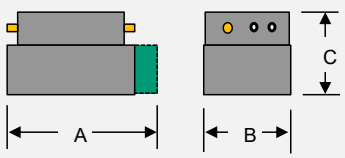
These plots include the allowance for 80% AM modulation. Performance at frequencies above 1GHz is dependant on the type of antenna, but are always better than the figures shown here for the 500-950MHz band for a given power input.



RF0250/RF1100/RF1300/RF1600



RF1170 & RF1330 (19" rack mounted)



	Style A	Style B
Width	300	482
Height	105	133
Depth	240	500

	RF1100/M	RF1405/M
A	221	178
B	173	83
C	103	55

RF1100/M & RF1405/M

Common specifications

Signal characteristics

Input/output impedance:	50ohm
RF input for max output:	0dBm
Class of operation:	AB
Gain flatness:	±1.5dB
Input VSWR:	2:1 max.
Harmonics:	-20dBc typical @ 1dB comp. power
Spurious signals:	-60dBc typical @ 1dB comp. power.
Output connector:	N type

General

AC input power:	100—240V ac 50/60Hz
Connector:	IEC
Cooling:	Forced air
Environmental:	0—50deg C, 95% humidity

Available from

LAPLACE INSTRUMENTS LTD
Tudor House, Grammar School Road,
North Walsham, Norfolk. NR28 9JH UK

Tel: +44 (0)16 92 40 20 70
Fax: +44 (0)16 92 40 49 10
Web site: www.laplace.co.uk
E-mail: tech@laplace.co.uk