VTL 5400 Amplifier
10 - 2500MHz 3W

- **Low noise figure**
- **High spectral purity**
- **Flexible operating conditions**

- **3 Watts at 1dB Gain Compression**

Model VTL 5400 gives 3W output power from 10MHz to 2.5GHz in one band, and with a minimum gain of 38dB, the amplifier can be driven from any convenient signal generator or sweep oscillator.

- **Low Noise Figure**

For applications requiring high signal to noise ratio, the amplifier offers a typical noise figure of 6dB, and with a 1/f corner frequency below the operating band of the amplifier, this low noise figure is maintained right down to the lower band edge.

- **High Spectral Purity**

Where spectral purity is an issue, harmonic reduction techniques in the design give a typical worst case harmonic performance of -30dBc at rated power, and 3 rd order intercept point of 48dBm.

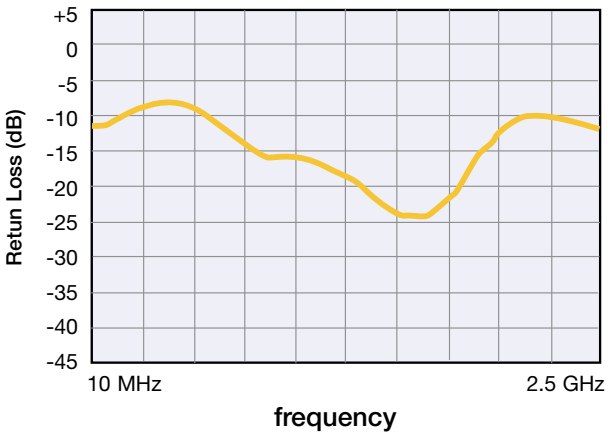
- **Flexible Operating Conditions**

The amplifier operates from a 12V supply with an economical current requirement of 1.65A. Specified operation is achieved with a wide range of supply voltage and thus is suitable for battery operation, whether the battery is under load or on charge. In addition, the amplifier will continue to operate with a supply voltage as low as 7V albeit with reduced performance, and so will give system tolerance to power supply brownouts. The amplifier is supplied with heat-sink, suitable for operation with convection cooling under normal circumstances.
The heat-sink is removable for system integration.

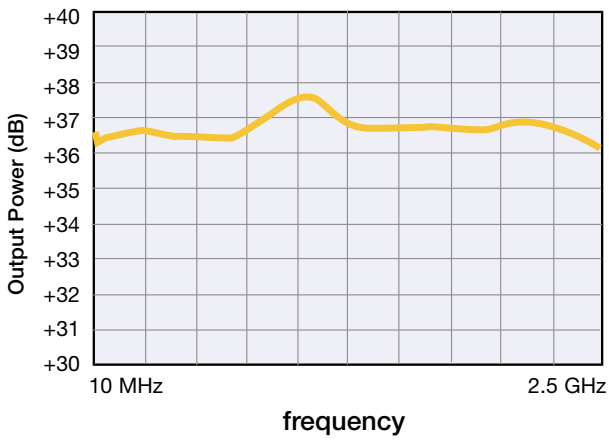
- **Applications**

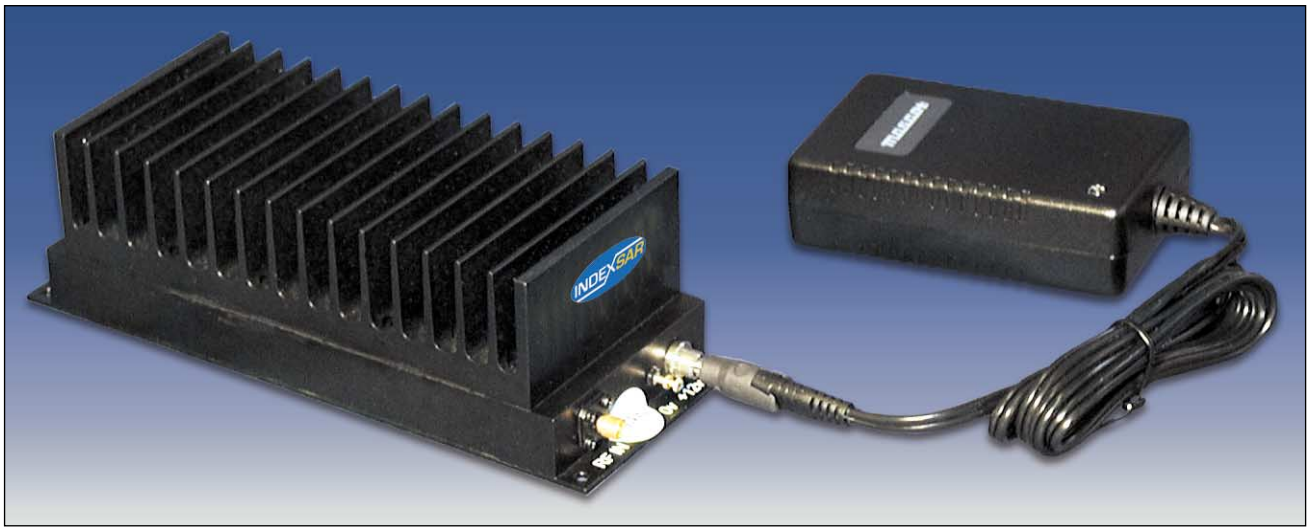
Applications include: high power buffer for signal generators, high level driver for high speed digital/analogue signals, multi-band communication systems and general laboratory use.
It is ideal for SAR probe calibration.

Output Return Loss (Typical)



Output Power with 0dBm input (Typ.)





Specification

	Min `	Typ	Max	Units
Frequency	10		2500	MHz
Output Power at 1dB gain compression	3			W
Small Signal Gain	38			dB
Gain Ripple	3			dB
3rd Order Intercept Point		48		dBm
Noise Figure		6		dB
Harmonics at rated power		-30	-25	dBc
Input and Output Mis-match Tolerance	inf : 1			
Input VSWR			2:1	
Output VSWR			3:1	
Supply Voltage	11	12	16	V
Supply Current		1.65	2	A
Operating Temperature Range	0		50	°C

RF Connectors	SMA female
Dimensions	195L x 75W x 60D mm
Weight	1.1 kg

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