MILMEGA
a TESEQ Company

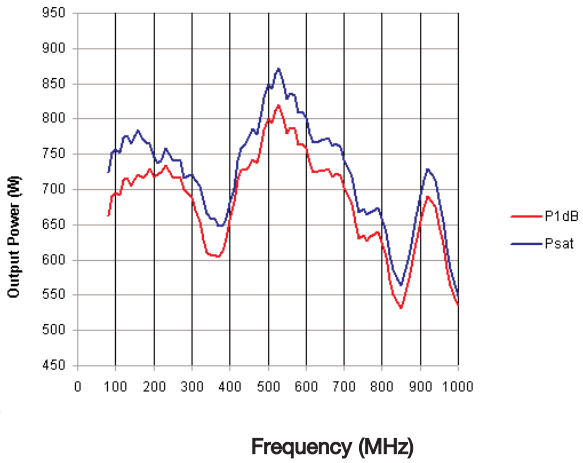
The MILMEGA RF Series 80 - 1000 MHz Solid State Amplifier Range

The MILMEGA RF Series broadband amplifiers have an innovative cable free motherboard which combines with the latest GaN transistor technology for exceptional, proven reliability. Amplifier control via IEEE, Ethernet, USB or RS232 is a standard feature. A safety interlock connector is provided via a rear panel D connector. Front panel indicators provide information on the operational status of the unit.

80RF1000-500, 500 Watt P1dB, 80 -1000 MHz Broadband Amplifier

Power 80-1000MHz	
Psat (min):	530 W (to 600MHz) 460 W (>600MHz)
Psat (min)	57.2 dBm (to 600MHz) 56.6 dBm (>600MHz)
P1dB (min):	500 W (to 600MHz) 450 W (>600MHz)
P1dB (min):	56.9 dBm (to 600MHz) 56.5 dBm (>600 MHz)
Noise figure (max):	10.0 dB
Gain variation:	± 3.5 dB

Harmonic distortion (max) at 450W	- 20 dBc
Power consumption:	4200 VA Max
Primary Power:	3 Phase (Star or Delta) 173 - 415 V (47 - 63 Hz)
RF Input:	Type N female
RF Output:	7/16th female
Weight:	100 kg
Size:	12U



Class leading linearity and noise specifications

- IP3 typically 8 dB> P1 dB
- Spurious (max) –70dBc
- Spurious (typical) –80 dBc

Reliable power

- Unbeatable power density
- RF Series will maintain forward power into any load condition, without damage
- Combiner/coupler integration as standard allows samples of incident and reflected power to be measured with virtually no loss
- 100% tested into exceptional load conditions

High visibility status and power indicators

- RF Series incorporate colour led bar graph displays on the front panel giving an indication of incident and reflected power
- Operational status of the amplifier clearly displayed on front panel

Other features

- Remote operation possible via IEEE, USB, Ethernet or RS232 as standard
- All data is measured at 25 °C driven from a 50 R source and driving into a 50 R load
- Input power (for rated output) + 3 dBm max
- Input power (no damage) +15 dBm
- Input VSWR (impedance 50 R nominal) 2:1 max
- Output VSWR (impedance 50 R nominal) 2:1 typical
- Load VSWR (any phase) is infinite
- Run Cool mechanical design
- Operating temperature (ambient air) 0 to 40 °C
- Storage temperature -40 to 70 °C.

Built-in protection

- Extensive internal monitoring protects the amplifier
- Unit incorporates an interlock function which disables RF output when activated

Easily rack mounted

- Amplifiers are standard 3U high units and may be combined in rack mounted form to build higher power amplifiers

Warranty

- 5 years parts and labour warranty on all RF Series amplifiers

Other amplifiers available in the 80 - 1000 MHz range:

- 80RF1000-175 – 175 watt
- 80RF1000-250 – 250 watt
- 80RF1000-1000 – 1000 watt

THE QUEEN'S AWARD FOR INNOVATION 2012

Designers and Manufacturers of High Power Microwave and RF Amplifiers

MILMEGA
a TESEQ Company

Issue 20.08.2012

MILMEGA Limited Park Road, Ryde, Isle of Wight, PO33 2BE United Kingdom
Tel. +44 (0) 1983 618004 Fax. +44 (0) 1983 811521 sales@milmega.co.uk www.milmega.co.uk