AS0104-55/30

1 GHz TO 4 GHz 55/30 WATT DUAL BAND POWER AMPLIFIER

- **Upgradeable to higher power**
- **High reliability GaAs transistor technology**
- **Mismatch tolerant and unconditionally stable**
- **Wide instantaneous bandwidth**
- **Unique five year parts, labour and shipping warranty**
- **Integral directional coupler**
- **RS232, USB and ethernet or RS232 and GPIB**

This innovative amplifier combines a compact design with market leading performance. Its ability to operate into any load without fold back makes this an ideal amplifier for all EMC RF immunity testing. The amplifier is supported via Milmega's unique five year parts, labour and shipping warranty and Teseq's local service network.

The amplifier is designed ready for a simple upgrade to higher power levels by the addition of extra power modules into the existing mainframe. If more power is required once fully loaded the unit can be integrated with further additional units to achieve power levels up to 400 watts.

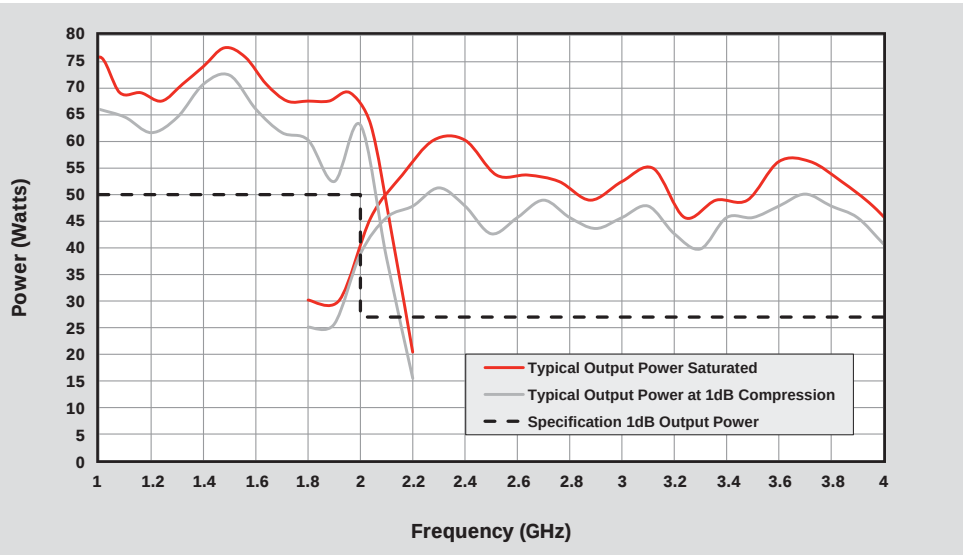
A selection of remote interfaces are available and the user can select, at time of ordering, either the internal RS232, USB and ethernet or the external RS232 and GPIB unit housed in a 1U module at no additional cost.

Internal RF switches, operated either manually via the front panel or by one of the selected remote interfaces, switch input, output and the forward and reverse sample ports for seamless operation across the wide 1 to 4 GHz range.

The GaAs balanced pair design at the core of the amplifier ensures a high reliability, linear performance across the frequency range. This design also ensures that the amplifier will continue to operate at full power even when presented with an open or short circuit at its output.

The unit is powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air-cooled with integral fans, and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and RF interlock condition.

Measured data



MILMEGA

a TESEQ Company

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Key RF Parameters

Frequency range	1 to 4 GHz	
Sub ranges	1 to 2 GHz	2 to 4 GHz
Rated output power	56 W minimum	30 W minimum
Power at 1 dB gain compression (P1dB)	50 W minimum	27 W minimum
Harmonics at 250 watts	-20 dBc typical	
Gain	42 dB	40 dB
Gain variation with frequency	+/-2 dB	
Maximum input power (no damage)	+15 dBm	

Impedance / VSWR

Output VSWR tolerance	Infinite any phase
Stability	Unconditional
Output impedance	50 Ohm
Output VSWR	2:1 typical
Input VSWR	2:1 max

Additional RF Data

Third order intercept point IP3	10 dB > P1dB	
Spurious	70 dBc max (80 dBc typical)	
Noise figure	6 dB	8 dB
RF connector style	Type N female	

Electrical and Interfaces

Remote control (either option included in price)	Internal RS232, USB and ethernet or RS232 and GPIB in additional external 1U high unit
Safety interlock	Via rear panel D Type connector
Supply voltage (single phase)	100 to 240 VAC +/-10%
Supply frequency	47 to 63 Hz
Supply power	1 kVA

Physical / Environmental

Case dimensions	19 inch, 3U case, 527 mm deep
Mass	24 kg
Operating temperature range	0 to 40° C (storage -40 to 70° C)

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