

## MILMEGA 'AS' Series Solid State Amplifier Range

### Model: AS0104R-280/300 Dual Band Amplifier



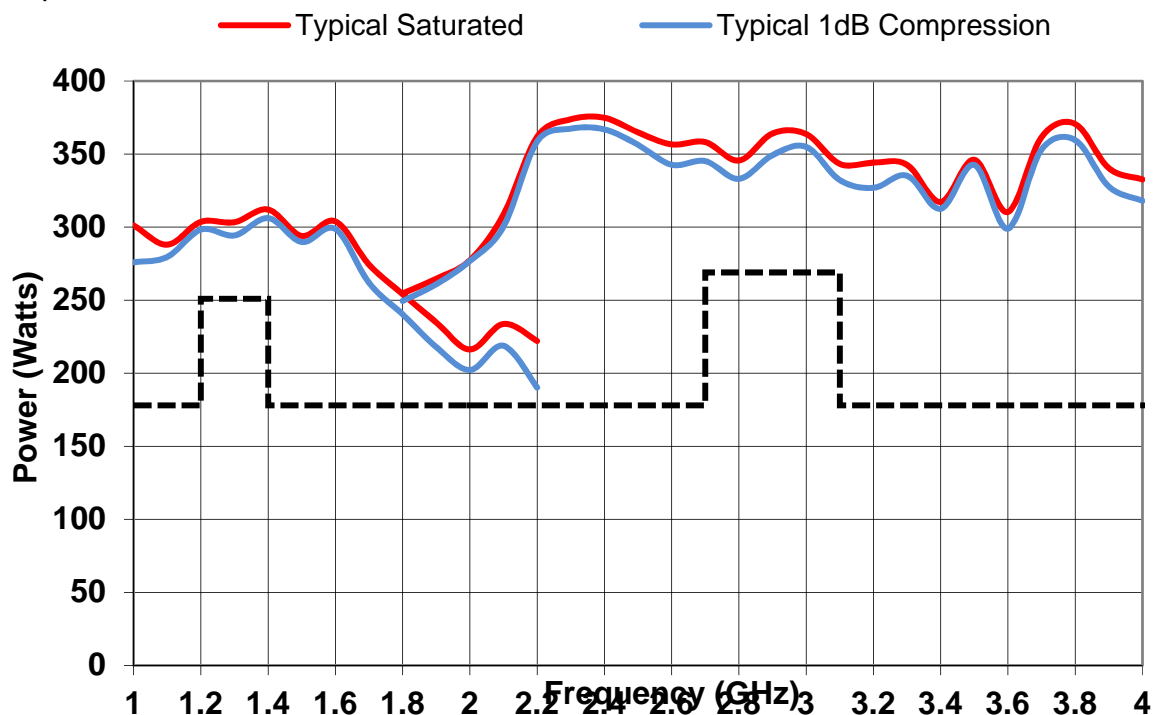
Mismatch tolerant and unconditionally stable

- High reliability GaAs transistor technology
- Calibrated Dual Directional Coupler fitted as standard
- Ethernet, USB and RS232 or GPIB and RS232 included in price
- Unique 5 year parts and labour warranty on all MILMEGA amplifiers.

The AS0104R series of solid state power amplifiers follows the MILMEGA tradition for compact, upgradeable microwave power amplifier solutions with field proven reliability, excellent linearity and low harmonics

The amplifier is designed with upgradability in mind. If more power is required this amplifier can be integrated with further additional units to achieve power levels up to 800 watts.

The amplifier is specially tuned and specified in the two automotive radar bands in order to guarantee at least 280 watts of usable power in the 1.2-1.4GHz range and 300 watts in the 2.7-3.1GHz range. 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.



# Amplifier Specification

<i>Radar Band Dependant Parameters</i>	1.2 to 1.4GHz	2.7 to 3.1GHz
Psat (min)	280W	300W
P1dB (min)	250W	269W
Gain (min)	50.00dB	50.30dB
Harmonics at P1dB	-20dBc	-20dBc

<i>Band Dependant Parameters</i>	1.0 to 2.0GHz	2.0 to 4.0GHz
Psat (min)	200W	200W
P1dB (min)	177W	177W
Gain (min)	50.00dB	50.30dB
Gain Variation (max)	+/- 1.0dB	+/- 2.0dB
Harmonics at P1dB	-20dBc	-20dBc
Third order intercept point IP3	10dB> P1dB	10dB> P1dB
Noise figure	6.0dB	8.0dB

<i>System Parameters</i>	
Input Power (no damage)	+15 dBm
Output VSWR tolerance	Infinite any phase
Stability	Unconditional
Output impedance	50 Ohm
Output VSWR	2:1 (typical)
Input VSWR	2:1
Spurious	-70 dBc (min) -80 dBc (typical)
Safety interlock	Via rear panel mounted BR2-female
Supply Voltage - 1 Phase	90 to 132 or 180 to 240 VAC
Supply Frequency	47 to 60 Hz
Supply Power (Band 1)	1.2 KVA (typical full power)
Supply Power (Band 2)	2.2 KVA (typical full power)
RF Input	Type N female
RF Output	Type N female
Dimension	19 inch, 16U Rack 776mm Deep
Weight	135 kg

Amplifiers that meet today's and tomorrow's needs through upgradability.



Specifications subject to change without notice. MILMEGA is an ISO accredited Company. Products are designed and manufactured under strict quality and environmental requirements of ISO 9001.



**RF/Microwave Amplifiers**

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