

This solid state GaAs FET amplifier is designed for **3G** wireless systems. The unit uses a ***built in linearizer***, which improves the OIP3 by almost 9 dB. The amplifier's operating frequency range is 2.0 to 2.5 GHz, the linear gain is 55 dB, the P1dB is +44 dBm, and the OIP3 is +63 dBm. The unit is available in modular form (standard), or as a rack mountable amplifier.



**Features**

- Mis-Match Protected
- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation
- Integral Output Isolator

**Options**

- Forward/Reverse Power Detection
- RF Sampling
- Pulse Control with switching speeds up to 100 kHz.
- Logic On/Off Control
- Heatsink

**Configurations**

- Module
- Laboratory Unit
- 19" Rack

Parameter	Specification
Frequency Range	2.0 - 2.5 GHz
Pout (P1dB)	+ 44 dBm
Third Order Intercept Point	+ 63 dBm (typ. over full band)
Linear Gain	55 dB $\pm$ 1 dB
Gain Flatness over Full Band	$\pm$ .5 dB
Gain Change over Temperature	$\pm$ .5 dB
Input/Output Return Loss	-16 dB / -18 dB (Output Isolator)
DC Input Voltage	+ 12 Volts
DC Input Current	8.5 Amperes (Varies per application)
Mechanical Dimensions Without Heatsink	7.5 x 3.97x 0.79 inches
RF Connectors	SMA Female
Operating Temperature	0°C to +55°C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level



---

Pin	Description	Values
RF INPUT	Input Connector (Female SMA)	- 10 dBm, typical
RF OUTPUT	Output Connector (Female SMA)	+44dBm @P1dB
RF SAMPLE	Sample RF Port (Female SMA)	30 dB
GND	Ground Turret	---
FWD	Forward Power Detector	+ 38 dBm Output Power $\approx$ + 2.5 Volts
REV	Reverse Power Detector	$\infty$ VSWR @ + 38 dBm $\approx$ + 3.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 8.5 Amperes (typ.)
ON/OFF	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
CNTL	TTL Pulse Control	Switching Speed up to 100 kHz

*Specifications subject to change without notice.*