

Model SM1923-41 1900-2300 MHz

1900-2300 MHz 12W Linear Power Amplifier

This affordable, high quality, solid state GaAs FET amplifier is designed for wireless applications. By using the latest surface mount technologies, this small amplifier can easily fit into tightly packed transmitters and repeaters.

Features include a Single DC Supply, Over/Reverse Voltage Protection, Thermal Protection with Auto Reset, Temperature Compensation, Logic On/Off Control, and an Integral Output Isolator. Options include Forward/Reverse Power Detection, RF Sampling and Level Control.

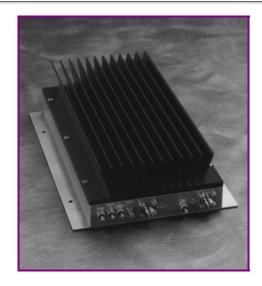
The unit includes an integral heatsink and is available in modular form (standard), or as a rack mountable amplifier.

Options

- Forward/Reverse Power Detection
- Level Control
- Logic On/Off Control
- Integral Heatsink

Configurations

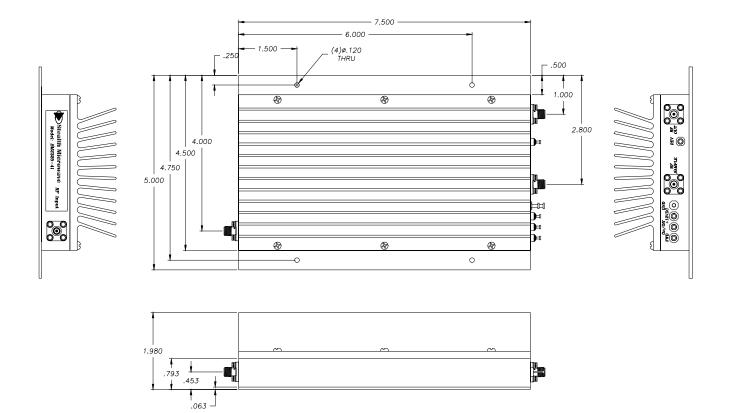
- Module
- Laboratory Unit
- 19" Rack



Parameter	Specification
Frequency Range	1.9 – 2.3 GHz (200 MHz bands)
Pout (P1dB)	+ 41 dBm
Third Order Intercept Point	+ 60 dBm
Linear Gain	$55 \text{ dB} \pm 1 \text{ dB}$
Gain Flatness over Full Band	± .5 dB
Gain Change over Temperature	± .5 dB
Input/Output Return Loss	-16 dB / -18 dB
DC Input Voltage	+ 12 Volts
DC Input Current, typ.	4.3 Amps
Level Control (Optional)	20 dB (min.)
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



DIMENSIONS IN INCHES



Pin	Description	Values
RF Input	Input Connector (SMA Female)	- 4 dBm, typical
RF OUT	Output Connector (SMA Female)	+ 41 dBm @ P1dB
RF SAMPLE (Optional)	Sample RF Port (SMA Female)	30 dBr
GND	Ground Turret	
REV	Reverse Power Detector	∞ VSWR @ + 42 dBm \approx + 5 Volts
FWD	Forward Power Detector	+ 42 dBm Output Power \approx + 5 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 6.6 Amps (typ.)
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

Specifications subject to change without notice.