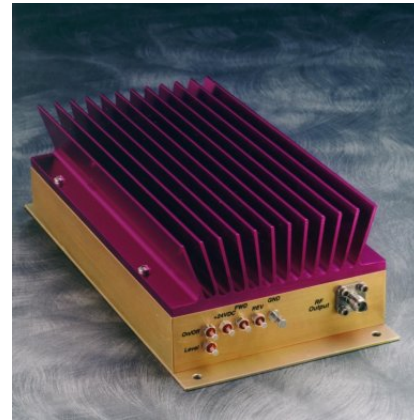


The **SM08790-47LDL** is an 869-896 MHz solid state LDMOS amplifier designed for the Cellular/GSM telephony market. Its compact size and ultra high linearity make it ideally suited for systems using CDMA, TDMA, or any high dynamic range multi-carrier applications. The P1dB is +47 dBm, the linear gain is 51 dB, and the gain change over temperature is only  $\pm 0.5$  dB. Stealth Microwave's proprietary predistortion technique allows for an OIP3 of +66 dBm. The unit comes standard in modular form or as a rack mountable amplifier.



### Features

- Mis-Match Protected
- Built in linearizer increasing the OIP3 by over 7dB
- Temperature Compensation
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

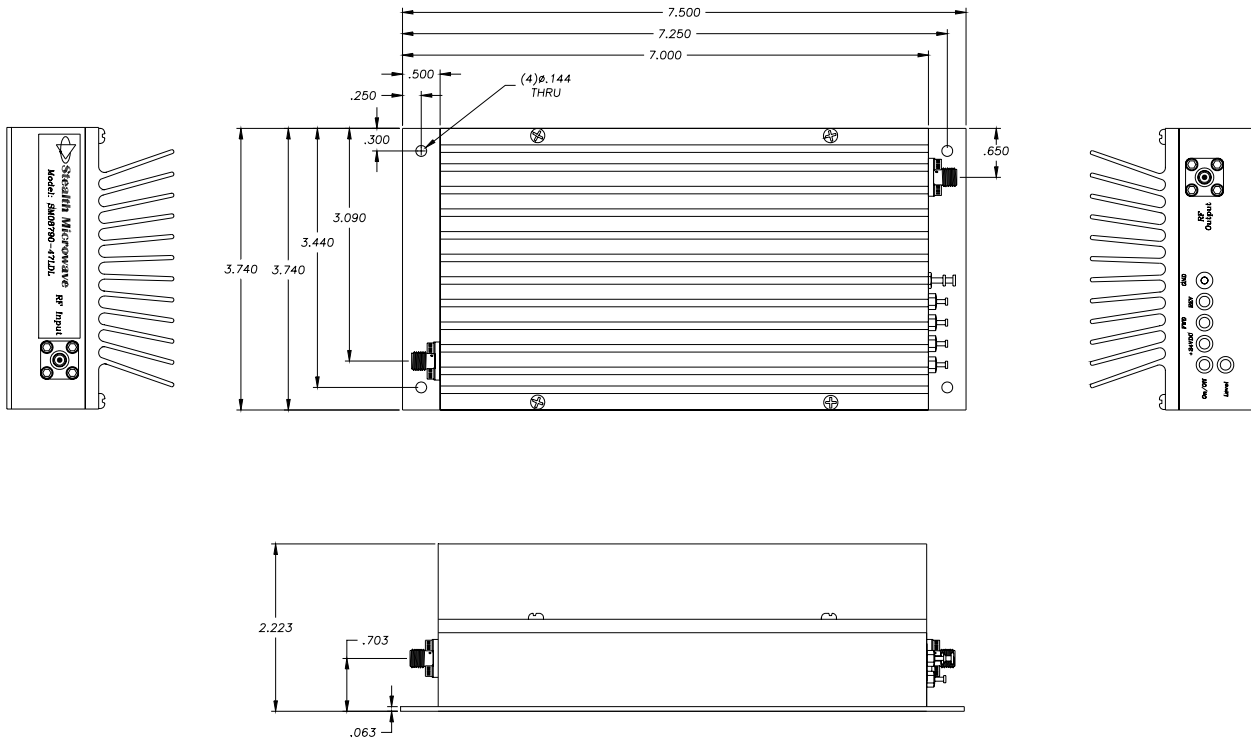
### Options

- Forward/Reverse Power Detection
- Harmonic Filter
- Thermal Alarm
- Integral Heatsink
- Logic On/Off Control

### Configurations

- Module
- 19" Rack

Parameter	Specification
Frequency Range	869 - 896 MHz
Pout (P1dB)	+ 47 dBm
Third Order Intercept Point	+ 66 dBm
Linear Gain	51 dB $\pm$ 1 dB
Gain Flatness over Full Band	$\pm .5$ dB
Gain Change over Temperature	$\pm .5$ dB
Input/Output Return Loss	-13 dB / -13 dB
DC Input Voltage	+ 24 Volts , +27 Volts optional
DC Input Current, typ.	5.1 Amperes at 41 dBm avg. 4FA, CDMA
Low Pass Filter (Optional) Out of Band Harmonic Content	- 55 dBc
Mechanical Dimensions With Heatsink	7.5 x 3.7 x 2.2 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

**DIMENSIONS IN INCHES**


Pin	Description	Values
RF Input	Input Connector (SMA Female )	- 3 dBm, typical
RF Output	Output Connector (SMA Female)	+ 47 dBm
GND	Ground Turret	---
REV	Reverse Power Detector	$\infty$ VSWR @ + 47 dBm $\approx$ + 5 Volts
FWD	Forward Power Detector	+ 47 dBm Output Power $\approx$ + 7 Volts
+24VDC	DC Input Voltage	+ 24 Volts @ 3.5 Amperes at 41 dBm avg.
On/Off	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On
Level	Voltage Variable Attenuator (VVA)	0 Volts = 0 dBr, + 5 Volts $\geq$ - 32 dBr

Specifications subject to change without notice.