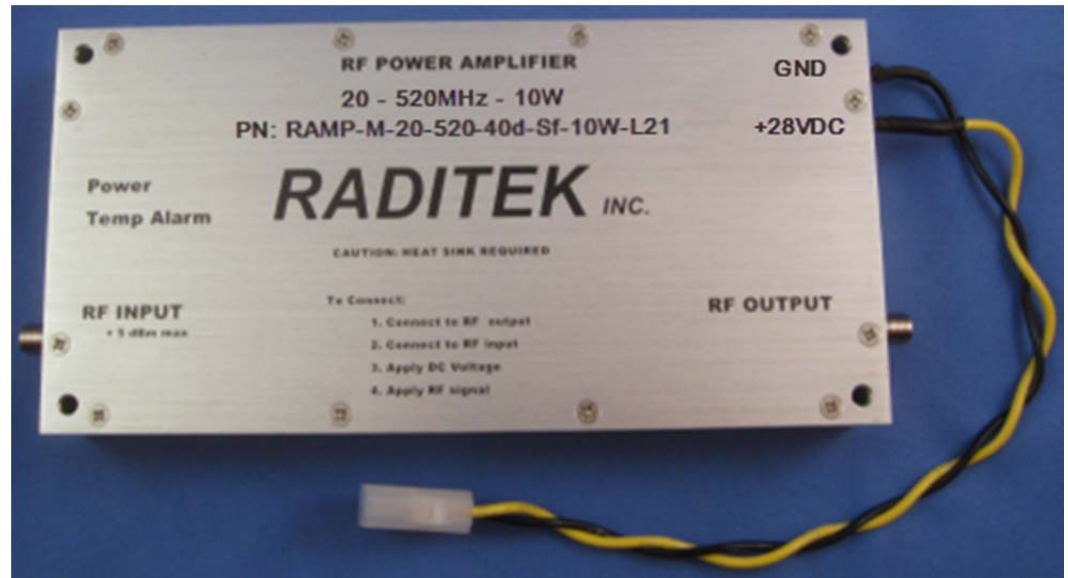


High Power Linear Amplifier, Ultra Broadband 20-520MHz, 40dB Gain, SMA Female Connectors, 10 Watts

This amplifier module utilizes high power advanced GaN devices that provide excellent power density, high efficiency, wide dynamic range and low distortions. Exceptional performance is achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components..

5 Years Warranty

- ▶ Solid-state Class AB linear design.
- ▶ Compact and lightweight.
- ▶ Suitable for most modulation types.
- ▶ Highly rugged and reliable.
- ▶ Instantaneous ultra broadband.
- ▶ M&C Monitor and Control.
- ▶ 50 ohm input and output impedance.



Order Examples: RAMP-M-20-520M-40d-Sf-10W-L21

Description: (Power Linear Amplifier, 20-520 MHz, SMA Connector 40 dB Gain 10 Watts Power, 24Volts DC Power)

ELECTRICAL SPECIFICATIONS @ +28 VDC, 25°C, 50 Ω System

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	20		520	MHz
Power Output CW	P _{SAT}	10	15		Watt
Power Output @ 1 dB Gain Compression Point	P _{1dB}	5	7		Watt
Power Gain @ 1 dB Gain Compression Point	G _{1dB}	40			dB
Input Power for Rated Output	P _{IN}		0		dBm
Small Signal Gain Flatness	ΔG		±1.0	±2	dB
Gain Adjustment Range (Optional)	VVA		N/A		dB
Input Return Loss	S ₁₁			-10	dB
Noise Figure	NF		7	10	dB
2-Tones Third Order Intercept Point P _{OUT} = 30 dBm/Tone, Δ = 100 KHz	IP3		+45		dBm
Harmonics @ 1 dB Gain Compression Point	H		-20		dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	V _{DC}	24	28	30	Volt
Supply Current @ nominal P _{1dB}	I _{DD}		1.25	1.8	Amp



RADITEK INC.

code-L21

High Power Linear Amplifier, Ultra Broadband 20-520MHz, 40dB Gain, SMA Female Connectors, 10 Watts

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	Tc	-20		+75	°C
Non-operating Temperature	Tstg	-40		+85	°C
Relative humidity (non-condensing)	RH			95	%
Altitude (MIL-STD-810F Method 500.4)	ALT	10,000		30,000	Feet
Shock / Vibration (MIL-STD-810F Method 500.4)	SH / VI		Airborne		

MECHANICAL SPECIFICATIONS

Parameter	Value	Units
Dimensions (excluding heatsink)	6.0 x 3.0 x 1.0	Inch
Weight without HS	1.0	lb.
RF Connectors In/Out	SMA female	
DC Connectors	Solder lugs	
Cooling	External Heatsink required	

PROTECTIONS

Parameter			Units
Input Overdrive	POD	+10	dBm Max
Load VSWR	Ψ	∞ @ all load phase & amplitude	Nom
Thermal Overload	TOD	85°C shutdown	Max

INTERFACE CONNECTOR – Solder lug

Pin #	Description	Specifications
1	Vcc	+ 28 V
2	Ground	Ground

**Adequate Heat Sink Required
OUTLINE DRAWING**