

# RADITEK

## SSPA 220Watts

### Solid State Power Amplifier 1.2-1.6 GHz 220 Watts CW

- Amplifier should be mounted on a heat sink with forced air cooling.
- RF sample monitoring via SMA female connector
- DC monitoring of RF output level



**Order Examples:** RAMP-M-1.2-1.6-Nf-49d28V-220Wcw-d16

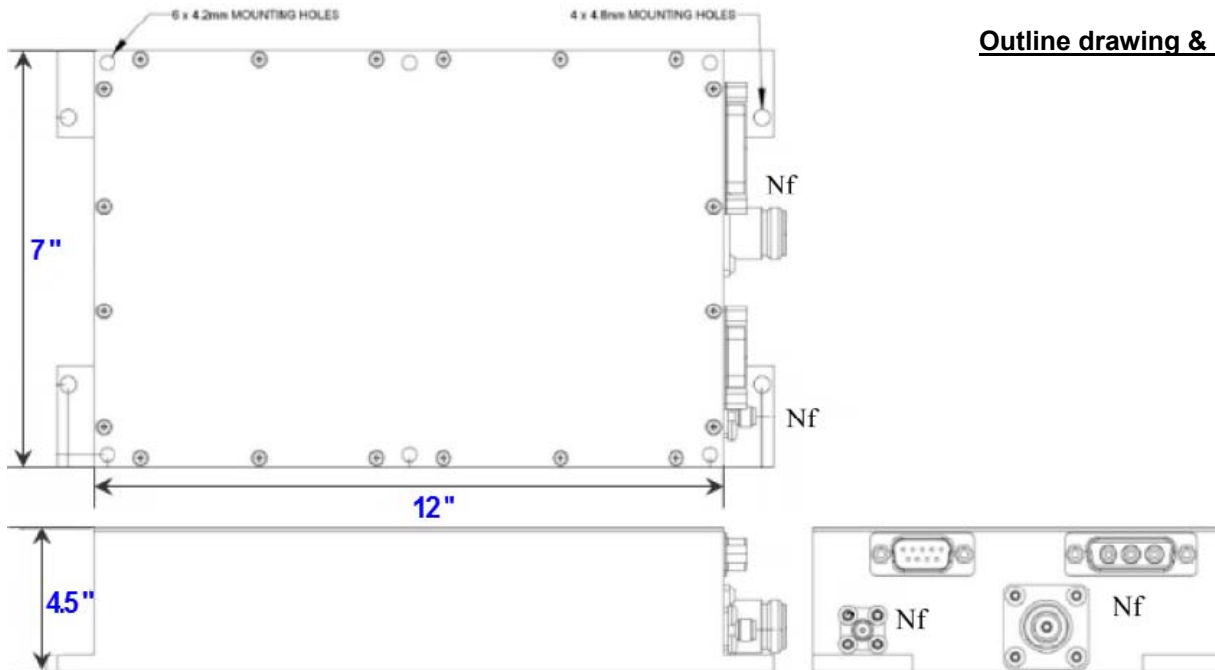
**Description:** (SSPA Module, 1.2-1.6GHz,N female Connectors, 49dB Gain 28Volt ,220W Continuous)

Parameter	Specifications	Units
Operating Frequency Range	1.2-1.6	GHz
Gain	≥49	dB
Gain flatness	≥±1dB min	dB
Output Power (@1dB Compression)	≥220Watts	Watts
Standard Output Power	≥220Watts	Watts
Output power flatness	± 1dB @ Pin=0dBm (over operating freq. band & operating temperature)	dB
Input power for rate output	<5 dbm,	dBm
Max i/p power without damage	+15 dBm	dBm
Turn on time	<100 ****	msec
Input and Output VSWR	2.0:1 max	
Load VSWR	Infinite	
Sample part	Forward output Power	
	Reflected output Power	
Pulse Width	10 to 30 ****	μ Sec
Duty Cycle	100 max	%
Pulse Repetition Frequency	40 max ****	KHz
Power variation during RF pulse	< 0.8 dB @ 30 μs pulse width and 40% duty ****	dB
Phase drift within the	5° max (Linear) pulse (@ peak output) ****	
RF rise/fall Time	< 50 ns ****	
Remote control	RS422 / RS485	
Harmonics	≤ -20	dBc
Spurious levels	≤-70 max	dBc
Noise Figure	≤6****	dB
Output third order intercept point	≥50	dBm
Phase noise	-70 dBc/Hz at 100 Hz from carrier (Input source phase noise <-80 dBc/Hz typ Amplifier should not add noise components more than 10dB)	dBc/Hz
Input Power	28V	DC
Input/Output Impedance	50 Ω	Ohms
Operating temperature	10 to +40	°C

## Solid State Power Amplifier Module 1.2-1.6GHz N female Connectors, 220 Watts Continuous Power

Mechanical Specifications		Units
M&C Interface RS422-DB25	a Forward & Reflected power	f. Voltage & Current of critical modules used in SSPA
	b Output VSWR	G. Forward power monitoring
	c. Duty Cycle	H. Reflected power monitoring
	e Temperature	I. Temperature health
	I. Over Temperature, automatic shutdown (resets when temperature returns to normal)	
Protection Against Damage (to be provided)	II. Over-current (automatic shutdown, requires resetting the unit to clear it)	
	III. Excess VSWR	
	IV. RF input over drive > +10dBm	
	Alarms	Over temp. with auto clear; Over-current, with man. clear, VSWR, I/P Over drive
Type of Package	Module 12" x 7" x 4.5" TBA	Inches
Mounting arrangement	Horizontal	
Weight	<30 Kg max	Kg
<b>Interfacing connectors</b>		
Control interface	D38999 SERIES III Circular connector	
RF Input RF Output Connectors	N Female	
RF output	N-Female Panel mount	
DC Line	D38999 SERIES III Circular connector	
Front Panel Control & Indicators	LED indication to be provided for power ON and RF power o/p.	
Environmental & EMI/EMC	Mil std 461F (Designed to meet but not tested)	
General notes	Power and Signal connectors have mating caps with metallic bead chain.	

Needs N connector for input


**Outline drawing & dimension**