

1KW Power

Specification

FM/VHF Broadcast Band Transmitter



Solid State Power Amplifier 87.5-108MHz, 1 KW Redundant

Special Features

- Hot Swappable RF and Power Supply Modules
- LCD Display /Microchip Controller/ Internal I2C Bus
- Dual Power Supply modules capable of producing 2KVA power at 50VDC each
- Dual RF Power modules with each module capable of producing 2KW RF Output (Scaled back to 1KW)



Our FM radio band amplifier has the capability of a continuous 1KW power output signal.

- Amplifier consists of two sets of dual power amplifier modules using the latest LDMOS technology in 1+1 redundancy.
- Each can produce up to a 2KW signal, (with the power scaled back for greater reliability to 1KW.)
- The fully redundant amplifier keeps the station "on-air" in case of a problem.
- The RF power modules are interconnected with relay switching controlled by the on board Microchip microcontroller.
- Maintenance may be performed on the RF power modules or the power supply modules while the station is "on-air".
- Each of the 2 power supply modules are capable of 2000 watts of DC power for the amplifiers and full power output can be maintained if a modules fails.

Order Examples: RAMP-R-87.5-108M-Sf-Nf-20d(90-264VAC)-1KW-1+1-d16

Description: SSPA, Rack 87.5-108MHz, SMA to N female Connector, 20dBm Gain, (90-264Volt AC), 1K Watts, 1+1 Redundant **Option**: (200-370VDC)

Specifications	RF Power Amplifier	Units
Frequency	87.5-108	MHz
Max Output Power	1KW (60dBm) from 2 combined 1KW amplifiers Either amplifier can supply the 1KW rated power, if one fails Combined the power is reduced so the 1KW rated power level is met	
In Band Gain	Adjustable from 10-20dB	
 The amplifier is designed to run at full power with a 10W (40dBm) input from an FM Exciter Continuous output at a lower level. The amplifier consists of Dual modules with each capable of 1000 watts RF power with power dividers at the input and power combining at the output The amplifiers will be mounted in a 19" rack assembly with forced air cooling. DC monitoring of RF Output level provided for each amplifier 		
Input connector	SMA Female	
Output connector	Type N Female	
Enclosure L x W x D	762 X 533 X 800 30 x 20.98 x 31.49 (18RU)	mm Inches
External AC Voltage	90-264 V _{AC at} 47-63 Hertz	
External DC Voltage (Optional)	200-370 V _{DC}	
M&C Interface:	External Control by RS485 and Ethernet RJ45 (monitor only)	
Alarms	Over Power, Under Power, Excess VSWR, Over Temperature	
LCD Readout:	RF Forward and Reflected Power, Amplifier current, Amplifier	

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Specifications may be subject to change

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temperature, DC Supply Voltage, Fan Status