



**SERVICE
MANUAL
RS8-1DD-MSI
RF POWER
AMPLIFIERS**

PRELIMINARY
(Pending completion of final manual)

**3370 SAN FERNANDO RD., #206
LOS ANGELES, CA 90065
PHONE: (323)-256-3000 FAX: (323)-254-3210
E Mail: electronic@compuserve.com**

Table of Contents

POWER AMPLIFIER SPECIFICATIONS	2
RS8-1DD-MSI	2
Theory of Operation	4
Appendix	5

POWER AMPLIFIER SPECIFICATIONS

RS8-1DD-MSI

Frequency: 806-960 MHz
Voltage: 13.8 VDC
Input Power: 5-15 watts
Output Power: 60-80 watts
Mode: FM

PARAMETER	MIN.	TYPICAL	MAX.	CONDITIONS	METHODS OF MEASUREMENT
Frequency Range	806 MHz		960 MHz		
Spurious & Harmonics		70 dBc			
Voltage		13.8 VDC			
Input/Output Impedance		50 ohms			
Power Gain		9 dB			
Input Power Range	5 watts		15 watts		
RF power output flatness	-1dB		+1dB	15 MHz	
RF Output Power	60 watts CW		80 watts CW		TIA/EIA-603 2.2.1
Transmit current drain			18.0 amps	80 W CW output	Current through DC supply line
Duty cycle		100%			

PARAMETER	MIN.	TYPICAL	MAX.	CONDITIONS	METHODS OF MEASUREMENT
Operating temperature	-30° C		+60° C		
Connector, Input		Type "BNC"		female I/O	
Connector, Output		Type "N"		female I/O	

Theory of Operation

The RS8-1DD-MSI RF Power Amplifier is designed to amplify a Frequency Modulated RF signal with a frequency range of 806 - 960 MHz, at 5 to 15 watts, to yield 60-80 W CW output. The amplifier is configured as a plug-in type with a front panel metering of the forward and reflected power.

APPENDIX