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MODEL 5163FE-015

0.8 - 4.2 GHz 50 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5163FE-015 is a 50 Watt broadband amplifier that covers the 0.8 – 4.2 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. The 5163FE-015 has the RF connectors located on the Front of the amplifier and communication ports on the Rear.

300	<u>Parameter</u>	Specification @ 25° C	
Electrical			
1	Frequency Range	0.8 – 4.2 GHz	
2	Saturated Output Power	50 Watts typical	
3	Power Output @ 1dB Comp.	40 Watts min	
4	Small Signal Gain	+48 dB min	
5	Small Signal Gain Flatness	<u>+</u> 3.0 dB max	
6	IP ₃	+56 dBm typical	
7	Input VSWR	2:1 max	
8	Harmonics	-20 dBc typical @ 40 Watts	
9	Spurious Signals	< -60 dBc typical @ 40 Watts	
10	Input/Output Impedance	50 Ohms nominal	
11	AC Input Power	600 Watts max	
12	AC Input	100 – 240 VAC, single phase	
13	RF Input	+10 dBm max	
14	RF Input Signal Format	CW/AM/FM/PM/Pulse	
15	Class of Operation	A/AB	
16	Customized Software	Set as Slave 1Controller	
<u>Mechanical</u>			
17	Dimensions	19" x 5.25" x 20"	
18	Weight	48 lb. max	
19	Connectors	Type-N	
20	Grounding	Chassis	
21	Cooling	Internal Forced Air	
<u>Environmental</u>			
22	Operating Temperature	0° C to +50° C	
23	Operating Humidity	95% Non-condensing	
24	Operating Altitude	Up to 10,000' Above Sea Level	
25	Shock and Vibration	Normal Truck Transport	

Specifications subject to change without notice.

CIRCUIT INDICATIONS

- ♦ Forward Power
- ♦ Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault
- ♦ Gain Setting (VVA) percentage

COMMUNICATION

- ♦ Ethernet
- ♦ IEEE-488

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CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ◊ Over Voltage

AMPLIFIER OPTIONS USING 6900002 (RF RELAY)

- ♦ Can be Used as standalone amplifier
- ♦ Can be Used in Dual Mode with 5125FE-015
- ♦ Can be Used in Group Mode with 5125FE-015 and 4010FE-015

Approved By:		Date:	
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