



5300 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)821-7413
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4159

800-1000 MHz
1000 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 4159 is a 1000 Watt broadband amplifier that covers the 800-1000 MHz frequency range. This small and lightweight amplifier utilizes Class A 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. Like all OPHIR_{RF} amplifiers, the 4159 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C			
		Minimum	Nominal	Maximum	Unit
Electrical					
1	Frequency Range	800		1000	MHz
2	Power at P _{SAT}	800	1000		Watts
3	Power at P _{1dB}	600	800		Watts
4	Small Signal Gain	61			dB
5	Gain Flatness			±1.5	dB
6	IP ₃		65		dBm
7	Input VSWR			2:1	Ratio
8	Harmonics @ 600W		-20		dBc
9	Spurious Signal @ 600W		-60		dBc
10	Input/Output Impedance		50		Ohms
11	AC Input Power			3500	Watts
12	AC Input	180-240 VAC Single Phase			
13	RF Input (No Damage)			0	dBm
14	RF Input Signal Format	CW/AM/FM/PM/Pulse			
15	Class of Operation	Class A/AB			
Mechanical					
16	Dimensions H x W x D	8.75" x 19" x 20"			
17	Weight		85		Lbs.
18	RF Connectors	Type-N Female Input Type-7/16 DIN Female Output			
19	Grounding	Chassis			
20	Cooling	Internal Forced Air			
Environmental					
21	Operating Temperature	0		50	° C
22	Operating Humidity	95% Non-condensing			
23	Operating Altitude	Up to 10,000' Above Sea Level			
24	Shock and Vibration	Normal Truck Transport			

Specifications subject to change without notice



0424 Approved By: _____ Date: _____



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FRONT PANEL CONTROLLER

- ◇ - Forward Power Monitoring (dBm or Watts)
- ◇ - Reflected Power Monitoring (dBm or Watts)
- ◇ - Gain Control (20 dB dynamic range of adjustment)
- ◇ - Fault Status
- ◇ - Full Protection Of any VSWR Condition, Open or Short, into any Phase Angle
- ◇ - Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
- ◇ - Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
- ◇ - Standby/Enable Control
- ◇ - Front Panel Display for easy viewing of System Status Locally
- ◇ - Keypad buttons for full local control

CIRCUIT PROTECTIONS

- ◇ - Thermal Overload
- ◇ - Over Current
- ◇ - Over Voltage
- ◇ - Open or Short VSWR Conditions

CIRCUIT CONTROL

- ◇ - Standby (amplifier disable)
- ◇ - Gain/power setting with 20dB range
- ◇ - VSWR protection Reset
- ◇ - ALC On/ Off

CIRCUIT INDICATION

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

RFPA SYSTEM OPTIONS

- ◇ - Switched Filter Bank
- ◇ - Input Power Requirements
- ◇ - Ruggedized Version
- ◇ - Cabinet Requirements
- ◇ - Outdoor Version
- ◇ - Sample Ports
- ◇ - Racking Options
- ◇ - Front Panel Controller ("E" Option)
- ◇ - **Consult Factory with Specific Requirements**

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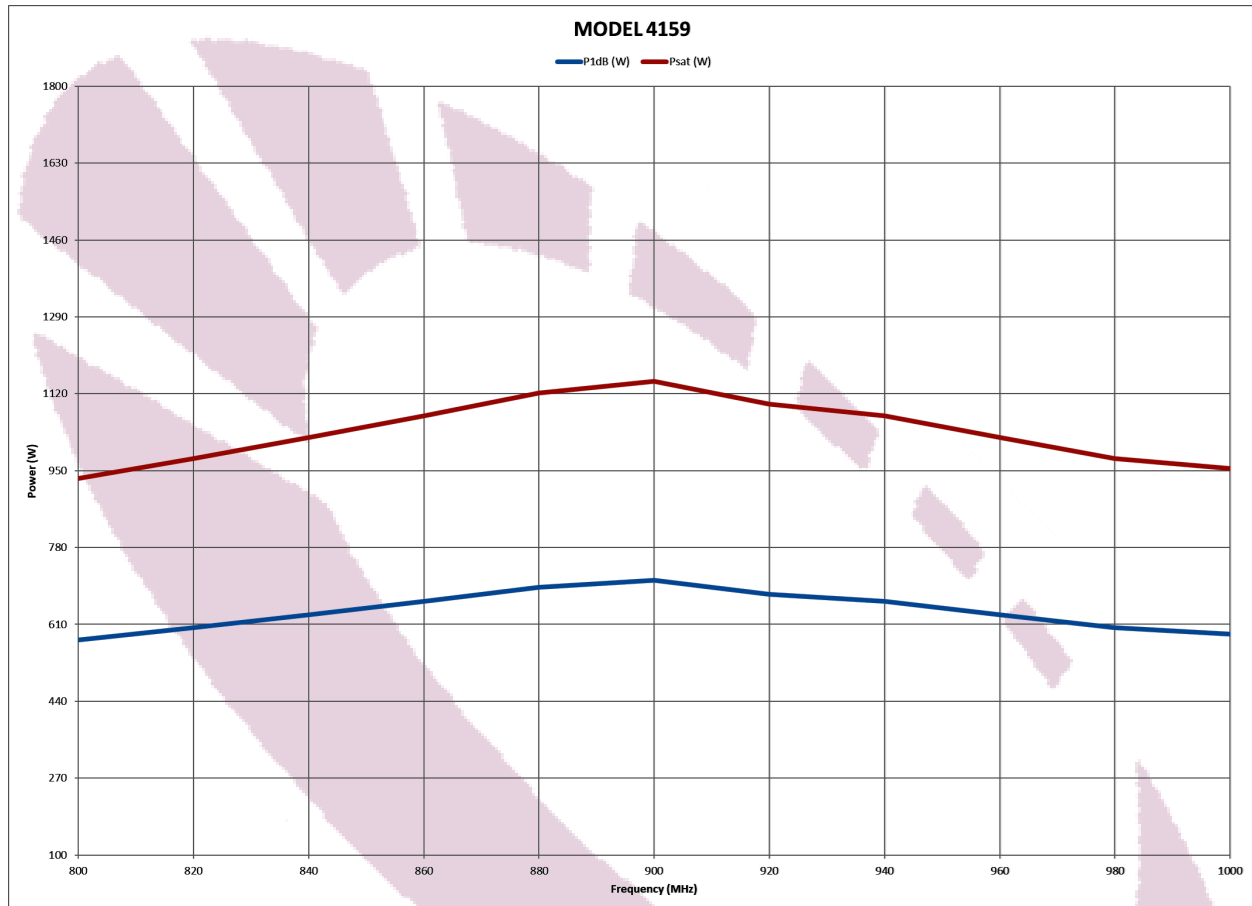
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ORDERING MODELS

- ◇ RE - Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232
- ◇ FE - Front RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232

