

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 5181

2.0 - 4.0 GHz 15 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5181 is a 15 Watt broadband amplifier that covers the 2.0 – 4.0 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. Like all OPHIR_{RF} amplifiers, the 5181 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	2.0- 4.0 GHz
2	Saturated Output Power	15 Watts typical
3	Power Output @ 1dB Comp.	12 Watts min
4	Small Signal Gain	+43 dB min
5	Small Signal Gain Flatness	<u>+</u> 1.5 dB max
6	IP ₃	+51 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 12 Watts
9	Spurious Signals	< -60 dBc typical @ 12 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	200 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
<u>Mechanical</u>		***
16	Dimensions	19" x 5.25" x 20"
17	Weight	37 Lbs.
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
21	Operating Temperature	0° C to +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

CIRCUIT CONTROL w Controller Option

- ♦ Standby (amplifier disable)
- ♦ Gain/power setting with 25dB range
- ♦ VSWR protection Reset
- ♦ ALC On/ Off

CIRCUIT INDICATIONS w controller option

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

ORDERING MODELS

- ♦ R Rear Panel Connectors♦ F Front Panel Connectors
- ♦ RE R model with Controller Ethernet, IEEE488 and RS232
- ♦ FE F model with Controller Ethernet, IEEE488 and RS232

07/13 Approved By: _

Specifications subject to change without notice



FE Model Shown

CIRCUIT PROTECTIONS

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

__ Date: _____