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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.

	Parameter	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	± 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
Mechanical		
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

Specifications subject to change without notice

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

FE Model Shown

CIRCUIT PROTECTIONS

◊ Thermal Overload
◊ Over Current
◊ Over Voltage

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: _____ Date: _____