

MODEL 4082

1.42 - 1.53 GHz

120 WATTS

LINEAR POWER RF AMPLIFIER

Solid State Band-specific High Power RF Amplifier

The 4082 is a 120 Watt band-specific amplifier that covers the 1.42 – 1.53 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 4082 comes with an extended multiyear warranty.

	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	1.42 – 1.53 GHz
2	Saturated Output Power	120 Watts Minimum
3	Power Output @ 1dB Comp.	100 Watts min
4	Small Signal Gain	+51 dB min
5	Small Signal Gain Flatness	± 1.0 dB max
6	IP ₃	+59 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc Minimum @ 100 Watts
9	Spurious Signals	< -60 dBc Minimum
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
Mechanical		
16	Dimensions	19" x 5.25" x 20"
17	Weight	50 lb. max
18	RF 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

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

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

CIRCUIT INDICATIONS

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

ORDERING MODELS

- ◇ RE - R model with Ethernet, IEEE488 and RS232
- ◇ FE - F model with Ethernet, IEEE488 and RS232



RE Model Shown