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## **MODEL 5142**

0.7 - 3.0 GHz 30 WATTS LINEAR POWER RF AMPLIFIER

## Solid State Broadband High Power RF Amplifier

The 5142 is a 30 Watt broadband amplifier that covers the 0.7 - 3.0 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide 3<sup>rd</sup> an excellent order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced and devices amplifier components, this achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5142 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	0.7 – 3.0 GHz
2	Saturated Output Power	30 Watts typical
3	Power Output @ 1dB Comp.	24 Watts min
4	Small Signal Gain	+46 dB min
5	Small Signal Gain Flatness	<u>+</u> 2.0 dB max
6	IP <sub>3</sub>	+54 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 24 Watts
9	Spurious Signals	< -60 dBc typical @ 24 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	350 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	38 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<u>Environmental</u>		
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 PROTECTIONS**

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

## **ORDERING MODELS**

- ♦ R Rear Panel Connectors
- ♦ F Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option



FE Model Shown

10/12	Approved By:	Data
10/12	Approved by.	Date: