OPHIR RF

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 XRF4144

**2-30 MHz
5000 WATTS
LINEAR POWER RF AMPLIFIER**

Solid State High Power RF Amplifier

The Model 4144 is a 5kW Broadband amplifier that covers the 2.0-30 MHz frequency range. This latest generation amplifier utilizes Class 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 4144 comes backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25º C			
Electrical		Minimum	Nominal	Maximum	Unit
1	Frequency Range	2.0		30	MHz
2	Rated Power	4000	5000		Watts
3	Small Signal Gain	68			dB
4	Gain Flatness			4.0	dB
5	IP_3		72		dBm
6	Input VSWR			2:1	Ratio
7	Harmonics (@ 5000 W)		-15		dBc
8	Spurious Signals		-60		dBc
9	Input/Output Impedance		50		Ohms
10	AC Input Power			10000	Watts
11	AC Input	180	208		VAC
12	RF Input			+0	dBm
13	RF Input Signal Format	CW/AM/FM/PM/Pulse			
14	Class of Operation	Class AB			
Mechanical					
15	Size (W" x H "x D")	24" x 60" x 36" (W x H x D)			
16	Weight	650			Lbs.
17	RF Connectors (Rear Panel)	RF Input Type-N Female RF Output Type-7/16 Female			
18	Grounding	Chassis			
19	Cooling	Internal Forced Air			
Environmental					
20	Operating Temperature	0		45	º C
21	Operating Humidity	95% Non-condensing			
22	Operating Altitude	Up to 10,000' Above Sea Level			
23	Shock and Vibration	Normal Truck Transport			

MADE IN USA

Specifications subject to change without notice

1123   Approved By: _____   Date: _____

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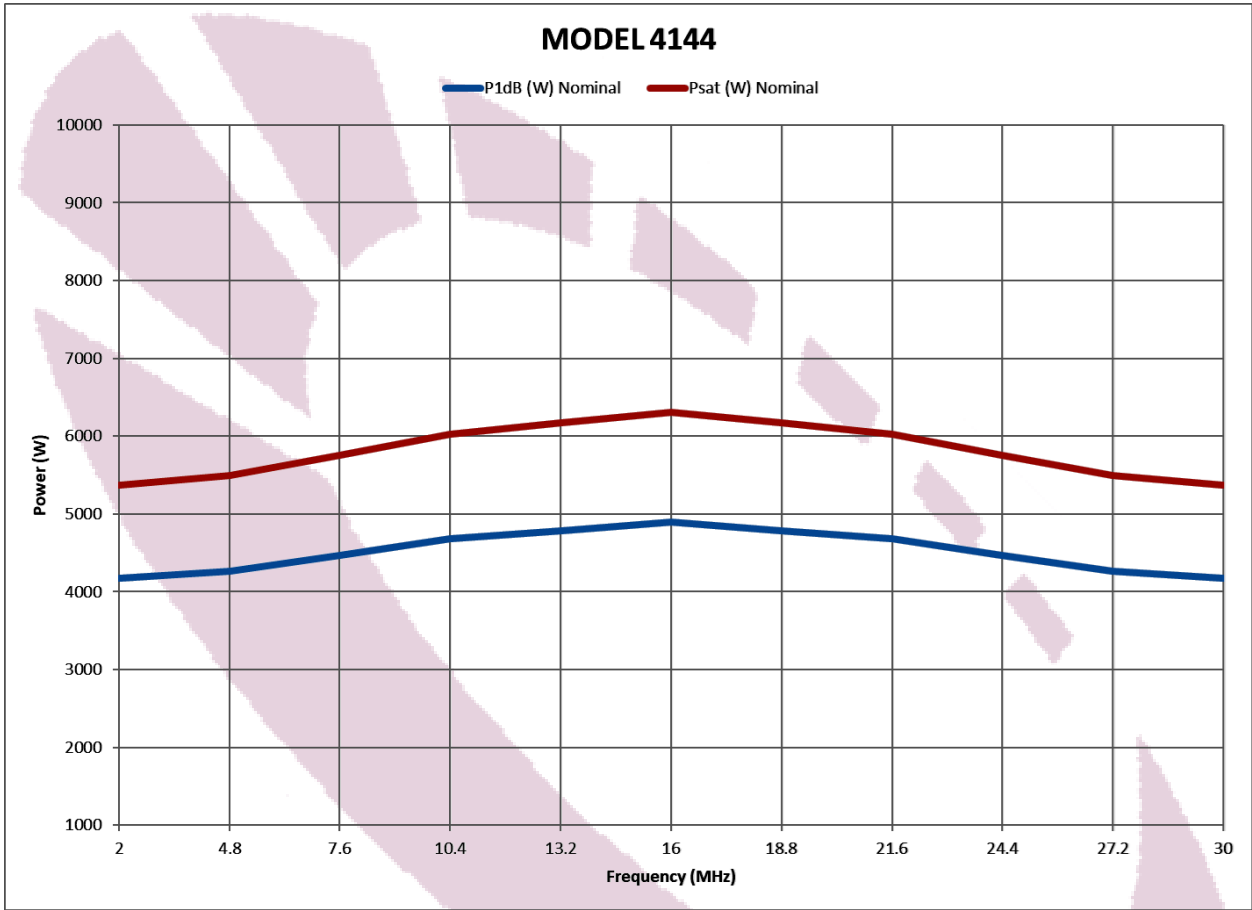### 2-30 MHz
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	Parameter
Front Panel Controller _(Optional)_	
24	Forward Power Monitoring
25	Reflected Power Monitoring
26	Gain Control (15 dB dynamic range of adjustment)
27	Fault Status
28	Full Protection Of any VSWR Condition, Open or Short, any Phase.
29	Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports
30	Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level
31	Standby/Enable Control
32	Front Panel Display for easy viewing of System Status Locally
33	Keypad buttons for full local control
Circuit Protections	
34	Thermal Overload
35	Over Current
36	Over Voltage
37	Open or Short VSWR Conditions _(With Front Panel Controller)_
Circuit Control	**_(With Front Panel Controller)_**
38	Standby (amplifier disable)
39	Gain/power setting with 15 dB range
40	VSWR protection Reset
41	ALC On/ Off
Circuit Indications	
42	Forward Power (With Front Panel Controller)
43	Reflected power (With Front Panel Controller)
44	VSWR Fault (With Front Panel Controller)
45	Temp Fault
46	Gain Setting (VVA) percentage (With Front Panel Controller)

MODEL 4144 OPTIONS

◊ LIQUID COOLING OPTIONS

◊ PRIMARY POWER OPTIONS

◊ INTEGRATED SWITCH FILTER BANK OPTIONS
    ◊ For full compliance of FCC Spectral Mask
    ◊ For Harmonic Suppression

◊ WEATHER RESITANT/SEISMIC CABINET OPTIONS

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— P1dB (W) Nominal   — Psat (W) Nominal

Power (W) vs Frequency (MHz)

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ANAB ACCREDITED — Certified to ISO 9001:2015 — TÜVRheinland Precisely Right.

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

1123 Approved By: _____ Date: _____