5200 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)821-7413
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5042

0.1-400 MHz
120 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5042 is a 120 Watt broadband amplifier that covers the 0.1- 400 MHz frequency range. This amplifier utilizes Class A 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 5042 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25º C
Electrical		
1	Frequency Range	0.1—400 MHz
2	Saturated Output Power	120 Watts Minimum
3	Power at P1dB	0.1-350 MHz:100W Min 350-400 MHz:80W Typ.
4	Small Signal Gain	+51.5 dB Minimum
5	Gain Flatness	± 2.5 dB Maximum
6	IP_3	+53 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-15 dBc min @ 100 Watts
9	Spurious Signals	< -60 dBc typical @ 100 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	1,500 Watts Maximum
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	Class A
Mechanical		
16	Dimensions	19" x 5.25" x 21" 3RU
17	Weight	45 Lbs.
18	RF Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
Environmental		
21	Operating Temperature	0º C to +50º 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

FE MODEL SHOWN

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
R Rear RF Connector model
F Front RF Connector model

04/18 Approved By: _____ Date: _____

5200 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)821-7413
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5042

0.1-400 MHz
120 WATTS
LINEAR POWER RF AMPLIFIER

FRONT PANEL CONTROLLER FEATURES (*Optional*)

◊ Forward Power Monitoring (dBm or Watts)
◊ Reflected Power Monitoring (dBm or Watts)
◊ Gain Control (20 dB dynamic range)
◊ Fault Status
◊ Full Protection Of any VSWR Condition, Open or Short, into any Phase angle
◊ Remote Control Access via the Ethernet, RS-232, or IEEE-488 communications ports
◊ Integrated Automatic Leveling Control to allow end-user to maintain A steady RF output level with variances in temperature, or input RF level
◊ Standby/Enable Control
◊ Front Panel Display for easy viewing of System Status Locally
◊ Keypad buttons for full local control

CIRCUIT CONTROL *(WITH FRONT PANEL CONTROLLER)*

◊ Standby (amplifier disable)
◊ Gain/power setting with 20 dB range
◊ VSWR protection Reset
◊ ALC On/ Off

CIRCUIT INDICATIONS *(WITH FRONT PANEL CONTROLLER)*

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

CIRCUIT PROTECTIONS

◊ Thermal Overload
◊ Over Current
◊ Over Voltage
◊ Open or Short VSWR Conditions *(With Front Panel Controller)*

RFPA SYSTEM OPTIONS

◊ Switched Filter Bank
◊ Input Power Requirements
◊ Ruggedized Version
◊ Cabinet Requirements
◊ Outdoor Version
◊ Sample Ports
◊ Racking Options
◊ Many More!
◊ ***Consult Factory with Specific Requirements***

Proudly made in the U.S.A.

ANAB ACCREDITED ISO/IEC 17021 MANAGEMENT SYSTEMS CERTIFICATION BODY
Certified to ISO 9001:2008
TÜVRheinland® Precisely Right.

04/18 Approved By: _____ Date: _____