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MODEL 5116
10 KHz - 225 MHz
5000 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5116 is a 5000 Watt broadband amplifier that covers the 0.01-225 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 5116 comes with a five year warranty backed by Ophir RF's commitment to total customer satisfaction.



Similar system shown

| | Parameter | Specification @ 25° C |
|----------------------|---------------------------|--|
| Electrical | | |
| 1 | Frequency Range | 0.01 – 225 MHz |
| 2 | Saturated Output Power | 5000 Watts ; 10 KHz-50 MHz 5000-4000 Watts; 50 MHz-200 MHz 3500 Watts; 200-225 MHz |
| 3 | Power Output @ 1dB Comp. | 3400 Watts ; 10 KHz-100 MHz 3400-2500 Watts; 100 MHz-200 MHz 2000 Watts; 200-225 MHz |
| 4 | Small Signal Gain | +67 dB min |
| 5 | Gain Flatness | +/- 4.0 dB Maximum |
| 6 | Input VSWR | 2:1 max |
| 7 | Harmonics | -20 dBc maximum @ 3000 Watts |
| 8 | Spurious Signals | -60 dBc typical @ 3000 Watts |
| 9 | Input/Output Impedance | 50 Ohms nominal |
| 10 | AC Input Power | 24,000 Watts maximum |
| 11 | AC Input | 187-264 VAC, 3Ø "Delta" (4-wire) |
| 12 | Nominal RF Input | 0 dBm |
| 13 | RF Input Overdrive | +10 dBm maximum |
| 14 | RF Input Signal Format | CW/AM/FM/PM |
| 15 | Class of Operation | A |
| Mechanical | | |
| 17 | Dimensions* (W x H x D) | 19" x 72" x 36" |
| 18 | Weight* | 800 lbs. max |
| 19 | RF Connectors | RF Input: Type-N RF Output: 1 5/8 DIN |
| 20 | Grounding | Chassis |
| 21 | Cooling | Internal Forced Air |
| Environmental | | |
| 22 | Operating Temperature | 0° C to +50° C |
| 23 | Operating Humidity | 95% Non-condensing |
| 24 | Operating Altitude | Up to 10,000' Above Sea Level |
| 25 | Shock and Vibration | Normal Truck Transport |

Specifications subject to change without notice

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



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|---|
| MODEL 5116 10 KHz - 225 MHz 5000 WATTS LINEAR POWER RF AMPLIFIER |
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FRONT PANEL CONTROLLER FEATURES

- ◇ Forward Power Monitoring (dBm or Watts)
- ◇ Reflected Power Monitoring (dBm or Watts)
- ◇ Gain Control (20 dB dynamic range of adjustment)
- ◇ 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 an even output RF 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

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

CIRCUIT INDICATIONS

- ◇ 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

RFPA SYSTEM OPTIONS

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

