

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 5016A**

0.8 - 2.0 GHz 25 WATTS LINEAR POWER RF AMPLIFIER

## Solid State Broadband High Power RF Amplifier

The 5016A is a 25 Watt broadband amplifier that covers the 0.8 - 2.0 GHz frequency range. This small lightweight amplifier and utilizes Class A/AB linear power devices that provide 3<sup>rd</sup> excellent order an 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 efficiency high operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5016A comes with an extended multiyear

	Parameter	Specification @ 25° C
<u>Electrical</u>	<u>i arameter</u>	Specification & 25 C
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1	Frequency Range	0.8 – 2.0 GHz
2	Saturated Output Power	25 Watts typical
3	Power Output @ 1dB Comp.	20 Watts min
4	Small Signal Gain	+44 dB min
5	Small Signal Gain Flatness	<u>+</u> 1.5 dB max
6	IP <sub>3</sub>	+53 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 20 Watts
9	Spurious Signals	< -60 dBc typical @ 20 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	220 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 Lbs.
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.



FE Model Shown

#### **ORDERING MODELS**

♦ FE

♦ RE \_ Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232

 Front RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232

♦ Rear RF Connector model

♦ F \_ Front RF Connector model

Approved By: Date:



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# FRONT PANEL CONTROLLER FEATURES (Optional)

- ♦ Forward Power Monitoring
- ♦ Reflected Power Monitoring
- ♦ 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 output even 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 20dB 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



