

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 5036**

500 - 1000 MHz 20 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5036 is a 20 Watt broadband amplifier that covers the 500 – 1000 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> 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<sub>RF</sub> amplifiers, the 5036 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	500 – 1000 MHz
2	Saturated Output Power	20 Watts typical
3	Power Output @ 1dB Comp.	13 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>	+47 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 13 Watts
9	Spurious Signals	< -60 dBc typical @ 13 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	200 Watts max
12	AC Input	100 – 240 VAC, single phase
13	RF Input	0 dBm
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
<u>Mechanical</u>		
16	Dimensions	19" x 5.25" x 20"
17	Weight	27 lb. max
18	Connectors	Type-N
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<b>Environmental</b>		
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**

- ♦ Rear Panel Connector Model
- ♦ F Front Panel Connector Model
- ♦ RE Rear Panel Connector Model with Ethernet, IEEE488 and RS232 Communication Ports
- ♦ FE Front Panel Connector Model with Ethernet, IEEE488 and RS232 Communication Ports

1112 Approved By: \_\_\_\_\_ Date: \_\_\_\_



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### FRONT PANEL CONTROLLER FEATURES

- ♦ Forward Power Monitoring
- ♦ Reflected Power Monitoring
- ♦ Gain Control (Continuously Variable VVA 20dB)
- ♦ 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, phase 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



