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 5006-009

300-350 MHz
500 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5006-009 is a 500 Watt broadband amplifier that covers the 300-350 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

This RF Amplifier system, comes standard with a 5RU tall 19" Rack Mount Enclosure.

It is the perfect choice for testing and tuning of RF Cavities. Although tuned for a specific frequency band, this RFPA is based on a wideband design that will give maximum performance across the 200-500MHz Band.

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 5006-009 comes with an extended multiyear warranty.

Specifications subject to change without notice.

	Parameter	Specification @ 25º C
Electrical		
1	Frequency Range	300-350 MHz
2	Saturated Output Power	500 Watts typical
3	Power Output @ 1dB Comp.	300 Watts min
4	Small Signal Gain	+58 dB min
5	Gain Flatness	± 2.0 dB
6	IP_3	+61 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-40 dBc Min @ 300 Watts in 322MHz Band
9	Spurious Signals	< -60 dBc typical @ 300 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2500 Watts max
12	AC Input	200 – 240 VAC, single phase
13	RF Input	0 dBm max
14	RF Input Signal Format	CW (Continuous Wave) AM (Amplitude Modulation) FM (Frequency Modulation) PM (Phase Modulation) Pulse
15	Class of Operation	AB
Mechanical		
16	Dimensions	19" x 8.75" x 20"
17	Weight	80 lb. max
18	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

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

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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***

ANAB ACCREDITED
Certified to ISO 9001:2008
TÜVRheinland Precisely Right.

Made in the U.S.A.

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