

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 5083-003

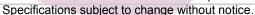
320-330 MHz 200 WATTS LINEAR POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 5083-003 is a 200 Watt broadband amplifier that covers the 225 – 400 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 efficiency achieves high operation with proven Like all OPHIR<sub>RF</sub> reliability. amplifiers, the 5083-003 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	320-330 MHz
2	Saturated Output Power	200 Watts typical
3	Power Output @ 1dB Comp.	125 Watts min
4	Small Signal Gain	+54 dB min
5	Small Signal Gain Flatness	<u>+</u> 1.5 dB max
6	IP <sub>3</sub>	+57 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ 125 Watts
9	Spurious Signals	< -60 dBc typical @ 125 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	800 Watts max
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	AB
<u>Mechanical</u>		
16	Dimensions	19" x 5.25" x 20"
17	Weight	45 lb. max
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





FE Model Shown

#### ORDERING MODELS

- Rear RF Connector Model

♦ F - Front RF Connector Model

♦ RE - R model with Ethernet, IEEE488 and RS232

♦ FE - F model with Ethernet, IEEE488 and RS232

#### "-003" SPECIAL FEATURES

- ♦ Tuned for optimum performance in the 320-330MHz Band
- ♦ Full VSWR protection by means of internal Isolator

06/12 Approved By: \_\_\_\_\_\_ Date: \_\_\_\_\_

♦ R



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 5083-003

320-330 MHz 200 WATTS LINEAR POWER RF AMPLIFIER

# 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 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





<sup>\*\*\*</sup>This unit has complete protection and operational capability with an internal isolator on the output of the RF section