



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 7005-001

THREE CHANNEL HIGH POWER RF AMPLIFIER

Channel 1; 80-1000MHz, 300 Watts

Channel 2; 1000-2000MHz, 120 Watts

Channel 3; 2000-6000MHz, 50 Watts

Solid State Broadband High Power RF Amplifier

The 7005-001 is a three channel RF Amplifier System that covers the 80 – 6000 MHz frequency range. Each channel can transmit independently and includes its own AC Input, RF Input and Output and IEEE-488 GPIB, RS-232 and Ethernet Interface .

Channel 1 is 80-1000MHz, 300W

Channel 2 is 1000-2000MHz, 120W

Channel 3 is 2000-6000MHz, 50W

The 7005-001 is based on the latest Ophir RF Field Proven Designs Systems.

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 7005-001 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	Parameter	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	Channel 1 80 to 1000MHz Channel 2 1000 to 2000MHz Channel 3 2500 to 6000MHz
2	Saturated Output Power	Channel 1 300W Minimum Channel 2 120W Minimum Channel 3 50W Minimum
3	Power Output @ 1dB Comp.	Channel 1 200W Minimum Channel 2 100W Minimum Channel 3 50W Minimum
4	Nominal input power for rated output power	0dBm
5	Gain Flatness	+/- 2.5 dB max with no ALC +/- 1.0 dB max with Internal Leveling
6	IP ₃	Typical +8dB above P1dB
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical
9	Spurious Signals	> -60 dBc typical
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	Ch 1 208-240VAC, 1Ø single Phase Ch 2 & 3 100-240VAC, 1Ø single Phase
12	AC Input Power	Channel 1 3000W max Channel 2 1200W max Channel 3 800W max
13	RF Coupling port for each Channel	Channel 1 53dB below peak power Channel 2,3 43dB below peak power
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
15	Class of Operation	AB
<u>Mechanical</u>		
16	Dimensions	42" x 24" x 30" (H x W x D) max
17	Weight	350 lb. max
18	Connectors	Type-N
19	User Interface	IEEE-488 GPIB
20	Front panel interface	Display, RF Input/Output Connectors AC Input/Output Switch, Coupling port
21	Rear panel interface	AC Connectors, IEEE-488 Connector
22	Grounding	Chassis
23	Cooling	Internal Forced Air
<u>Environmental</u>		
24	Operating Temperature	0° C to +50° C
25	Operating Humidity	95% Non-condensing
26	Operating Altitude	Up to 10,000' Above Sea Level
27	Shock and Vibration	Normal Truck Transport



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EACH CHANNEL (RFPA SHELF) HAS THE FOLLOWING FEATURES

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

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 20dB 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 (*With Front Panel Controller*)

RFPA SYSTEM OPTIONS

- ◇ Switched Filter Bank
- ◇ Input Power Requirements
- ◇ Ruggedized Version
- ◇ Cabinet Requirements (***Cabinet Included in this system***)
- ◇ Outdoor Version
- ◇ Sample Ports (**Forward Power sample ports Included In this System**)
- ◇ Racking Options
- ◇ Many More!
- ◇ ***Consult Factory with Specific Requirements***





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