

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**

#### 80 - 6000 MHz THREE CHANNEL 50 to 300 WATTS HIGH POWER RF AMPLIFIER

# Solid State Broadband High Power RF Amplifier

The 7005 is a three channel amplifier that covers the 80 – 6000 MHz frequency range. Each channel can transmit independently and includes its AC, RF and IEEE-488 GPIB interface.

The 7005 is based on Ophir RF standard legacy proven systems 5226, 5253FE and 5193FE.

. Due to robust engineering and employment of the most advanced devices and this amplifier components, achieves high efficiency operation with proven reliability, Like all OPHIR<sub>RF</sub> amplifiers, the 7005 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

Specifications subject to change without notice



	<u>Parameter</u>	Specification @ 25° C
<u>Electrical</u>		
1	Frequency Range	Channel 1 80 to 1000MHz Channel 2 700 to 2500MHz Channel 3 2000 to 6000MHz
2	Saturated Output Power	Channel 1 300W Minimum Channel 2 80W Minimum Channel 3 50W Minimum
3	RF Input	0dBm Nominal For Rated Power
4	Gain Flatness	+/- 2.5 dB max with no ALC +/- 1.0 dB max with Internal Leveling
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical
8	Spurious Signals	< -60 dBc typical
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	Ch 1 208-240VAC, 1Ø single Phase
11	AC Input Power	Channel 1 4000W max Channel 2 1200W max Channel 3 800W max
12	RF Coupling port for each Channel	Channel 1 53dB below peak power Channel 2,3 43dB below peak power
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	Class A
<u>Mechanical</u>		
15	Dimensions	42" x 24" x 30" (H x W x D) max
16	Weight	250 lb. max
17	Connectors	Type-N
18	User Interface	Ethernet, RS-232, IEEE-488 GPIB
19	Front panel interface	Display, RF Input/Output Connectors AC Input/Output Switch, Coupling port
20	Rear panel interface	AC Connectors, IEEE-488 Connector
ice 21	Grounding	Chassis
22	Cooling	Internal Forced Air
<b>Environmental</b>		
23	Operating Temperature	0° C to +50° C
24	Operating Humidity	95% Non-condensing
25	Operating Altitude	Up to 10,000' Above Sea Level
26	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

O113 Approved By: Date:



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**

80 - 6000 MHz THREE CHANNEL 50 to 300 WATTS HIGH POWER RF AMPLIFIER

## 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





Specifications subject to change without notice