

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 4007-006

445-455 MHz 1000 WATTS LINEAR POWER RF AMPLIFIER

Solid State Band-specific High Power RF Amplifier

The 4007-006 is a 1000 Watt band-specific amplifier that covers the 445-455 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.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency with proven operation reliability. Like all OPHIR_{RF} amplifiers, the 4007-006 comes with an extended multiyear warranty.

	<u>Parameter</u>	Specification @ 25° C	
Electrical			
1	Frequency Range	445-455 MHz	
2	Saturated Output Power	1000 Watts typical	
3	Power Output @ 1dB Comp.	600 Watts min	
4	Small Signal Gain	+62 dB min	
5	Small Signal Gain Flatness	<u>+</u> 1.5dB max	
6	IP ₃	+64 dBm typical	
7	Input VSWR	2:1 max	
8	Harmonics	-20 dBc typical @ 600 Watts	
9	Spurious Signals	< -60 dBc typical @ 600 Watts	
10	Input/Output Impedance	50 Ohms nominal	
11	AC Input Power	3300 Watts max	
12	AC Input	180 – 240 VAC, single phase or 3 phases	
13	RF Input	0 dBm typical	
14	RF Input Signal Format	CW/AM/FM/PM/Pulse	
15	Class of Operation	AB	
<u>Mechanical</u>			
16	Dimensions	19" x 8.75" x 20"	
17	Weight	85 lb. max	
18	Connectors	Type-N	
19	Grounding	Chassis	
20	Cooling	Internal Forced Air	
Environmental			
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	

Information Subject to change at anytime

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
- ♦ Rear RF Connector model
- ♦ F _ Front RF Connector model

0311	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)

SPECIAL FEATURES

♦ Internal Isolator, rated for full RF Output Power





