

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 4043-006

1 - 30 MHz 500 WATTS LINEAR POWER RF AMPLIFIER

Solid State Band-Specific High Power RF Amplifier

The 4043-006 is a 500 Watt band-specific amplifier covers the 1 - 30 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 this amplifier components, achieves high efficiency operation with proven reliability, Like all OPHIR_{RF} amplifiers, the 4043-006 comes with extended multiyear warranty backed by **Ophir** commitment to total customer satisfaction.

_	<u>Parameter</u>	Specification @ 25 °C
<u>Electrical</u>		
1	Frequency Range	2 – 30 MHz
2	Power Output @ 1dB Comp.	500 Watts min
3	Small Signal Gain	+60 dB min
4	Small Signal Gain Flatness	± 2.0 dB max
5	IP ₃	+64 dBm typical
6	Input/Output VSWR	2:1 max Fully protected against Open/ Short
7	Harmonics	-20 dBc typical @ 500 Watts
8	Spurious Signals	< -60 dBc typical @ 500 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	3000 Watts max
11	AC Input	200-240 VAC ± 10%, single phase
12	RF Input	0 dBm nominal for full rated power +13dBm with no damage
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	AB
<u>Mechanical</u>		
15	Dimensions	19" x 7.0" x 26"
16	Weight	110 lb. max
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<u>Environmental</u>		
20	Operating Temperature Storage Temperature	0° C to +45° C -20° C to +85° C
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 2000 m Above Sea Level
23	Shock and Vibration	Normal Truck Transport



FE MODEL SHOWN

♦ 4043RE-006

♦ 4043FE-006

Specifications subject to change without notice

ORDERING MODELS

Rear RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232

Front RF Connector model with Front Panel Controller Ethernet, IEEE-488 and RS232

O713 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)

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

