

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 4018**

#### 20-100 MHz 2000 WATTS PEAK LINEAR POWER RF AMPLIFIER

# Solid State Band-Specific High Power RF Amplifier

The 4018 is a 2000 Watt band-specific amplifier that covers the 20-100 MHz frequency range. This 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 achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 4018 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

_	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	20-100 MHz
2	Saturated Output Power	2000 Watts Peak
3	Average Output Power	500 Watts CW Avg
4	Small Signal Gain	+63 dB min
5	Small Signal Gain Flatness	<u>+</u> 3.0 dB max
6	IP <sub>3</sub>	+66 dBm
7	Input VSWR	2:1 max
8	Harmonics	-15 dBc typical @ 500 Watts
9	Spurious Signals	-60 dBc typical @ 500 Watts
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	5500 Watts max
12	AC Input	220 VAC, 50 Hz, 3Ø
13	Nominal RF Input	0 dBm for full rated power
14	RF Input Overdrive	+10 dBm max
15	RF Input Signal Format	AM Modulation
16	Class of Operation	AB
<u>Mechanical</u>		
17	Dimensions* (W x H x D)	22.5" x 31" x 26"
18	Weight*	300 lbs. max
19	RF Connectors	Input Type N Output Type-7/16
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<u>Environmental</u>		
22	Operating Temperature	-10° C to +55° C
23	Storage Temperature	-20° C to +60° C
23	Operating Humidity	95% Non-condensing
24	Operating Altitude	Up to 10,000' Above Sea Level
25	Shock and Vibration	Normal Truck Transport

Specifications subject to change without notice. \* Dimensions and weight include cabinet enclosure.



**FE Model Shown** 

#### **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
- Rear RF Connector model
- Front RF Connector model

O513 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



Date: