



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 4041**  
**2 - 30 MHz**  
**300 WATTS**  
**LINEAR POWER RF AMPLIFIER**

**Solid State  
 Band-specific High  
 Power RF Amplifier**

The 4041 is a 300 Watt band-specific amplifier that covers the 2 – 30 MHz frequency range. This small and lightweight 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 4041 comes with an extended multiyear warranty.

	Parameter	Specification @ 25 °C
<b><u>Electrical</u></b>		
1	Frequency Range	2 – 30 MHz
2	Saturated Output Power	300 Watts minimum
3	Power Output @ 1dB Comp.	250 Watts minimum
5	Small Signal Gain	+56 dB min
6	Small Signal Gain Flatness	± 1.5 dB max
7	IP <sub>3</sub>	+59 dBm typical
8	Input VSWR	2:1 max
9	Harmonics	-15 dBc typical @ 250 Watts
10	Spurious Signals	< -60 dBc typical @ 250 Watts
11	Input/Output Impedance	50 Ohms nominal
12	AC Input Power	1,200 Watts max
13	AC Input	100 – 240 VAC, single phase
14	RF Input	<b>0 dBm max.</b>
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	A
<b><u>Mechanical</u></b>		
17	Dimensions	19" x 5.25" x 21"
18	Weight	54 lbs.
19	Connectors	Type-N
20	Grounding	Chassis
21	Cooling	Internal Forced Air
<b><u>Environmental</u></b>		
22	Operating Temperature	0° C to +50° 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*



**FE MODEL SHOWN**

**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



5300 Beethoven Street, Los Angeles, CA 90066  
TEL: (310)306-5556 • FAX: (310)821-7413  
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

<p><b>MODEL 4041</b></p> <p><b>2 - 30 MHz</b> <b>300 WATTS</b> <b>LINEAR POWER RF AMPLIFIER</b></p>
---

### FRONT PANEL CONTROLLER FEATURES (*Optional*)

- ◇ - Forward Power Monitoring (dBm or Watts)
- ◇ - Reflected Power Monitoring (dBm or Watts)
- ◇ - 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 PROTECTIONS

- ◇ - Thermal Overload
- ◇ - Over Current
- ◇ - Over Voltage
- ◇ - Open or Short VSWR Conditions (*With Front Panel Controller*)

### CIRCUIT CONTROL (*WITH FRONT PANEL CONTROLLER*)

- ◇ - Standby (amplifier disable)
- ◇ - Gain/power setting with 20 dB 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

### 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**

