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MODEL 5205-001

0.4 – 2.0 GHz
50 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

The 5205-001 is a 50 Watt broadband amplifier that covers the 0.4-2.0 GHz 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 operation with proven reliability.

Like all OPHIR_{RF} amplifiers, the 5205-001 comes with an extended multiyear warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	0.4-2.0 GHz
2	Saturated Output Power	50 Watts Typical
3	Power @ 1dB Compression	24 Watts Minimum
3	Small Signal Gain	+48 dB min
4	Power Flatness	± 2.0 dB max
5	IP ₃	+54 dBm typical
6	Input VSWR	2:1 max
7	Harmonics	-20 dBc typical @ 24 Watts
8	Spurious Signals	< -60 dBc typical @ 24 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	600 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	10 dBm maximum 0 dBm nominal for Rated Power
13	RF Input Signal Format	CW/AM/FM/PM/Pulse
14	Class of Operation	A/AB
<u>Mechanical</u>		
15	Dimensions	19" x 5.25" x 20"
16	Weight	36 Lbs.
17	Connectors	Type-N
18	Grounding	Chassis
19	Cooling	Internal Forced Air
<u>Environmental</u>		
20	Operating Temperature	0° C to +50° C
21	Operating Humidity	95% Non-condensing
22	Operating Altitude	Up to 10,000' Above Sea Level
23	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



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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**

