O DPHIR_₽₽

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

MODEL 5255

0.7 - 2.5 GHz 250 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5255 is a 250 Watt broadband amplifier that covers the 0.7 - 2.5 GHz frequency range. This small and lightweight amplifier utilizes Class A 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 5255 comes with an industry leading Five (5) year warranty backed by Ophir RF's commitment to total customer satisfaction.

	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	0.7 – 2.5 GHz
2	Saturated Output Power	250 Watts minimum
3	Power out at 1dB compression	150 Watts minimum
4	Small Signal Gain	+56 dB minimum
5	Power Flatness	+/- 2.5 dB maximum
6	IP ₃	+60 dBm typical
7	Input VSWR	2:1 max
8	Harmonics	-20 dBc typical @ P-1dB
9	Spurious Signals	< -60 dBc typical @ P-1dB
10	Input/Output Impedance	50 Ohms nominal
11	AC Input Power	2,000 Watts maximum
12	AC Input	180 – 240 VAC, single phase
13	RF Input	0 dBm maximum
14	RF Input Signal Format	CW/AM/FM/PM/Pulse
14 15	RF Input Signal Format Class of Operation	CW/AM/FM/PM/Pulse
15		
15 <u>Mechanical</u>	Class of Operation	A
15 <u>Mechanical</u> 16	Class of Operation Dimensions	A 19" x 5.25" x 26"
15 <u>Mechanical</u> 16 17	Class of Operation Dimensions Weight	A 19" x 5.25" x 26" 65 Lbs.
15 <u>Mechanical</u> 16 17 18	Class of Operation Dimensions Weight Connectors	A 19" x 5.25" x 26" 65 Lbs. Type-N
15 <u>Mechanical</u> 16 17 18 18 19	Class of Operation Dimensions Weight Connectors Grounding	A 19" x 5.25" x 26" 65 Lbs. Type-N Chassis
15 <u>Mechanical</u> 16 17 18 19 20	Class of Operation Dimensions Weight Connectors Grounding	A 19" x 5.25" x 26" 65 Lbs. Type-N Chassis
15 Mechanical 16 17 18 19 20 Environmental	Class of Operation Dimensions Weight Connectors Grounding Cooling	A 19" x 5.25" x 26" 65 Lbs. Type-N Chassis Internal Forced Air
15 <u>Mechanical</u> 16 17 18 19 20 <u>Environmental</u> 21	Class of Operation Dimensions Weight Connectors Grounding Cooling Operating Temperature	A 19" x 5.25" x 26" 65 Lbs. Type-N Chassis Internal Forced Air 0° C to +50° C
15 Mechanical 16 17 18 19 20 Environmental 21 22	Class of Operation Dimensions Weight Connectors Grounding Cooling Operating Temperature Operating Humidity	A 19" x 5.25" x 26" 65 Lbs. Type-N Chassis Internal Forced Air 0° C to +50° C 95% Non-condensing

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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MODEL 5255

0.7 - 2.5 GHz 250 WATTS LINEAR POWER RF AMPLIFIER

FRONT PANEL CONTROLLER FEATURES (Optional)

- ◊ Forward Power Monitoring (dBm or Watts)
- ◊ Reflected Power Monitoring (dBm or Watts)
- ◊ 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 a steady output level 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

- Or 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!
- **Organization of Consult Factory with Specific Requirements**

Specifications subject to change without notice



01/21 Approved By:

Date: