



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 4010
800 - 1000 MHz
300 WATTS
LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 4010 is a 300 Watt broadband amplifier that covers the 800 – 1000 MHz frequency range. This 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 4010 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 | 800 – 1000 MHz |
| 2 | Saturated Output Power | 300 Watts Minimum |
| 3 | Power at P1dB | 200 Watts Minimum |
| 4 | Small Signal Gain | +56 dB Minimum |
| 5 | Small Signal Gain Flatness Gain Flatness | ± 1.5 dB Maximum ± 1.0 dB Maximum |
| 6 | IP ₃ | +62 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc Min @ 200 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 200 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 1,600 Watts Maximum |
| 12 | AC Input | 100 – 240 VAC, single phase, 47-63 Hz |
| 13 | RF Input | 0 dBm max |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | Class A |
| <u>Mechanical</u> | | |
| 16 | Dimensions (3RU) | 19" x 5.25 x 22" |
| 17 | Weight | 46 lbs. |
| 18 | Connectors | Type-N |
| 19 | Grounding | Chassis |
| 20 | Cooling | Internal Forced Air |
| <u>Environmental</u> | | |
| 21 | Operating Temperature | 0° C to +50° C |
| 22 | Operating Humidity | 95% Non-condensing |
| 23 | Operating Altitude | Up to 10,000' Above Sea Level |
| 24 | Shock and Vibration | Normal Truck Transport |

Specifications subject to change without notice



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| | <u>Parameter</u> |
|--------------------------------------|--|
| <u>Front Panel Controller</u> | |
| 25 | Forward Power Monitoring (dBm or Watts) |
| 26 | Reflected Power Monitoring (dBm or Watts) |
| 27 | Gain Control (20 dB dynamic range of adjustment) |
| 28 | Fault Status |
| 29 | Full Protection Of any VSWR Condition, Open or Short, any Phase. |
| 30 | Remote Control Access via the Ethernet, RS-232, or IEEE-488 Communications ports |
| 31 | Integrated Automatic Leveling Control to allow end-user to maintain output even with variances in temperature, or input RF level |
| 32 | Standby/Enable Control |
| 33 | Front Panel Display for easy viewing of System Status Locally |
| 34 | Keypad buttons for full local control |
| <u>Circuit Protections</u> | |
| 35 | Thermal Overload |
| 36 | Over Current |
| 37 | Over Voltage |
| 38 | Open or Short VSWR Conditions |
| <u>Circuit Control</u> | |
| 39 | Standby (amplifier disable) |
| 40 | Gain/power setting with 20 dB range |
| 41 | VSWR protection Reset |
| 42 | ALC On/ Off |
| <u>Circuit Indications</u> | |
| 43 | Forward Power |
| 44 | Reflected power |
| 45 | VSWR Fault |
| 46 | Temp Fault |
| 47 | Gain Setting (VVA) percentage |
| <u>Options</u> | |
| 48 | AC Input power options (3Ø, 400 Hz, DC, etc.) |
| 49 | Outdoor Chassis |
| 50 | Switched Filter Bank for Harmonic Suppression & FCC Spectral Mask Compliance |



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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



MADE IN USA



11/24 Approved By: _____ Date: _____