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MODEL 4003

1.8 - 2.0 GHz **120 WATTS** LINEAR POWER RF AMPLIFIER

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

The 4003 is a 120 Watt band-specific amplifier that covers the 1.8 - 2.0frequency 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 4003 comes with an extended multiyear warranty.

| | <u>Parameter</u> | Specification @ 25° C | |
|----------------------|----------------------------|--|--|
| Electrical | | | |
| 1 | Frequency Range | 1.8 – 2.0 GHz | |
| 2 | Saturated Output Power | 120 Watts typical | |
| 3 | Power Output @ 1dB Comp. | 100 Watts min | |
| 4 | Small Signal Gain | +52 dB min | |
| 5 | Small Signal Gain Flatness | <u>+</u> 0.75 dB max | |
| 6 | IP ₃ | +60 dBm typical | |
| 7 | Input VSWR | 2:1 max | |
| 8 | Harmonics | -20 dBc typical @ 100 Watts | |
| 9 | Spurious Signals | > -60 dBc typical @ 100 Watts | |
| 10 | Input/Output Impedance | 50 Ohms nominal | |
| 11 | AC Input Power | 600 Watts max | |
| 12 | AC Input | 100 – 240 VAC, single phase | |
| 13 | RF Input | +10 dBm max | |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse | |
| 15 | Class of Operation | A/AB | |
| <u>Mechanical</u> | | | |
| 16 | Dimensions | 19" x 5.25" x 20" | |
| 17 | Weight | 48 lb. max | |
| 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. | |

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ◊ Over Voltage

ORDERING MODELS

- ♦ R - Rear Panel Connectors
- ♦ F - Front Panel Connectors
- ♦ RE R model w/Control Option
- ♦ FE F model w/Control Option
- ♦ RT RE model w/Ethernet Interface
- ♦ FT FE model w/Ethernet Interface F Model Shown



| Approved By: | Date: |
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| Approved by. | Date. |