# MODEL 5165

## 0.8 - 4.2 GHz
## 250/200 WATTS
## LINEAR POWER RF AMPLIFIER

## Solid State Broadband High Power RF Amplifier

The 5165 is a 250/200 Watt broadband amplifier that covers the 0.8 – 4.2 GHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3$^{rd}$ 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.

| | Parameter | Specification @ 25° C |
|---|---|---|
| **Electrical** | | |
| 1 | Frequency Range | 0.8 – 4.2 GHz |
| 2 | Saturated Output Power | 250 Watts min @ 0.8 to 3GHz<br>200W min @ 3 to 4.2GHz |
| 4 | Small Signal Gain | +55 dB min |
| 5 | Power Flatness @ each band | +/- 1.5 dB max with no ALC<br>+/- 1 dB max with internal leveling |
| 6 | IP$_3$ | +60 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical |
| 9 | Spurious Signals | > -60 dBc typical |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | AC Input Power | 3000 Watts max |
| 12 | AC Input | 180 – 264 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 |
| **Mechanical** | | |
| 16 | Dimensions | 19" x 14" x 26" |
| 17 | Weight | 150 lb. max |
| 18 | Connectors | Type-N |
| 19 | Grounding | Chassis |
| 20 | Cooling | Internal Forced Air |
| **Environmental** | | |
| 21 | Operating Temperature | 0º C to +50º C |
| 22 | Operating Humidity | 95% Non-condensing |
| 23 | Operating Altitude | Up to 10,000' Above Sea Level |
| 24 | Shock and Vibration | Normal Truck Transport |

## CIRCUIT PROTECTIONS
◊ Thermal Overload
◊ Over Current
◊ Over Voltage
◊ VSWR protection

## CIRCUIT INDICATIONS
◊ Forward Power
◊ Reflected power
◊ VSWR Fault
◊ Temp Fault
◊ Gain Setting (VVA) percentage

## CIRCUIT CONTROL
◊ Standby (amplifier disable)
◊ Gain/power setting with 25dB range
◊ VSWR protection Reset

## ORDERING MODELS
◊ RE  - Rear Panel model with RS232 & IEEE
◊ FE  - Front Panel model with RS232 & IEEE
◊ RT  - Rear Panel model with Ethernet Interface
◊ FT  - Front Panel model with Ethernet Interface

Specifications subject to change without notice