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## MODEL 5112-ODU

**200 - 500 MHz**  
**300 WATTS**  
**LINEAR POWER RF AMPLIFIER**

### Solid State Broadband High Power RF Amplifier

The 5112-ODU is a 300 Watt broadband amplifier that covers the 200 – 500 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> order intercept point, high gain, and a wide dynamic range.

In addition, the 5112-ODU is housed in a NEMA 4X rated outdoor enclosure, with an integrated cooling unit to provide full operation even into the most harsh environments.

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<sub>RF</sub> amplifiers, the 5112 comes with an extended multiyear warranty.

|                             | Parameter                  | Specification @ 25° C         |
|-----------------------------|----------------------------|-------------------------------|
| <b><u>Electrical</u></b>    |                            |                               |
| 1                           | Frequency Range            | 200 – 500 MHz                 |
| 2                           | Saturated Output Power     | 300 Watts typical             |
| 3                           | Power Output @ 1dB Comp.   | 180 Watts min                 |
| 4                           | Small Signal Gain          | +54 dB min                    |
| 5                           | Small Signal Gain Flatness | ± 2.0 dB max                  |
| 6                           | IP <sub>3</sub>            | +59 dBm typical               |
| 7                           | Input VSWR                 | 2:1 max                       |
| 8                           | Harmonics                  | -20 dBc typical @ 180 Watts   |
| 9                           | Spurious Signals           | > -60 dBc typical @ 180 Watts |
| 10                          | Input/Output Impedance     | 50 Ohms nominal               |
| 11                          | AC Input Power             | 2000 Watts max                |
| 12                          | AC Input                   | 100 – 240 VAC, single phase   |
| 13                          | RF Input                   | 0 dBm max                     |
| 14                          | RF Input Signal Format     | CW/AM/FM/PM/Pulse             |
| 15                          | Class of Operation         | AB                            |
| <b><u>Mechanical</u></b>    |                            |                               |
| 16                          | Dimensions                 | 19" x 7" x 20"                |
| 17                          | Weight                     | 55 lb. max                    |
| 18                          | Connectors                 | Type-N                        |
| 19                          | Grounding                  | Chassis                       |
| 20                          | Cooling                    | Internal Forced Air           |
| <b><u>Environmental</u></b> |                            |                               |
| 21                          | Operating Temperature      | 0° C to +65° C                |
| 22                          | Operating Humidity         | 100% 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 INDICATIONS

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) percentage

### CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage

### CIRCUIT CONTROL

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off



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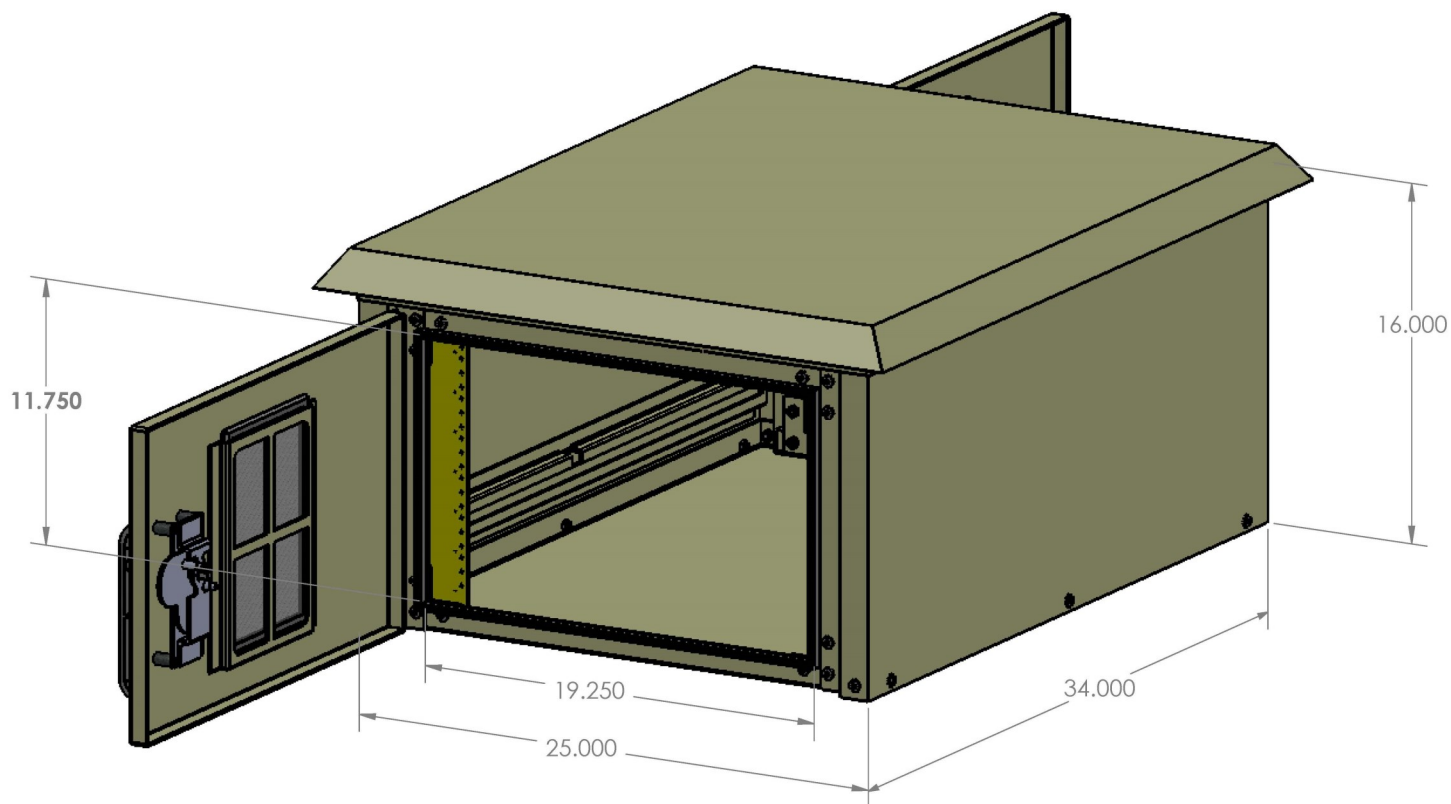
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### Enclosure Special Features (May not be Shown)

- ◇ Housed in NEMA 4X rated Outdoor Enclosure
- ◇ Expanded Operating Temperature with Integrated Cooling Unit
- ◇ 4" C Channel Rails on bottom of enclosure to keep unit elevated off the ground
- ◇ RoxTec Cable entry system
- ◇ Front and rear access doors
- ◇ Carrying Handles (Recommend 4-Man Lift)

Specifications subject to change without notice



FE Model Shown

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_