



AMP8002-HD-ODA OUTDOOR SERIES SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Exodus AMP8002-HD-ODA S-Band Amplifier is suitable for mobile and fixed SATCOM Up-Link applications. These product feature high linear power, good efficiency and long term reliability in a light weight and small form factor outdoor unit for harsh operating conditions. Built in features include remote user interface for control & monitoring.

Other Features:

Small form factor & light weight Outdoor Antenna Hub-Mounting

High reliability and ruggedness

Protection: Against high VSWR (Reflected Power). Against high temp (thermal interlock)

Cooling: Forced air with integral heat sink

Amp Construction: High reliability GaN/LDMOS device. Class AB or better

ELECTRICAL SPECIFICATIONS @ 25°C, 50Ω

| Parameter | Specification | Notes |
|------------------------------|---|-----------------------|
| Operating Frequency Range | 2.025 - 2.120 GHz | |
| Power Output Psat | >100 Watt | CW |
| Power Output @ P1dB | 100 Watt | CW |
| Power Gain | 55 dB Min | |
| Gain Adjustment Range | 20 dB in 0.1 dB steps | |
| Power Gain Flatness | ±1.0 dB Max | Over entire band |
| Out of Band Gain Reduction: | 30 dB min at freq >2200 MHz and <1925 MHz | |
| Input/Output VSWR: | 1.4:1 max.14 dB Min | Relative to 50 Ohm |
| Load VSWR: | 2.0:1 (for full spec compliance) | |
| 2-Tone Intermodulation (IMD) | -25 dBc Max | @P1dB - 3dB, Δ = 1MHz |
| Harmonics | -50 dBc | At rated P1dB |
| AM / PM Conversion | 4.0° / dB max. | At rated P1dB |
| Noise Figure | 11 dB Max | |
| Non Harmonics Spurious | -60 dBc Max | |
| Operating Voltage | 230 VAC Nom | 47/60Hz |
| Current Consumption | 900 Watt Max | At rated P1dB |
| Max Input Power | -5 dBm | Without damage |
| Load VSWR Protection | ∞ : 1 Min | |

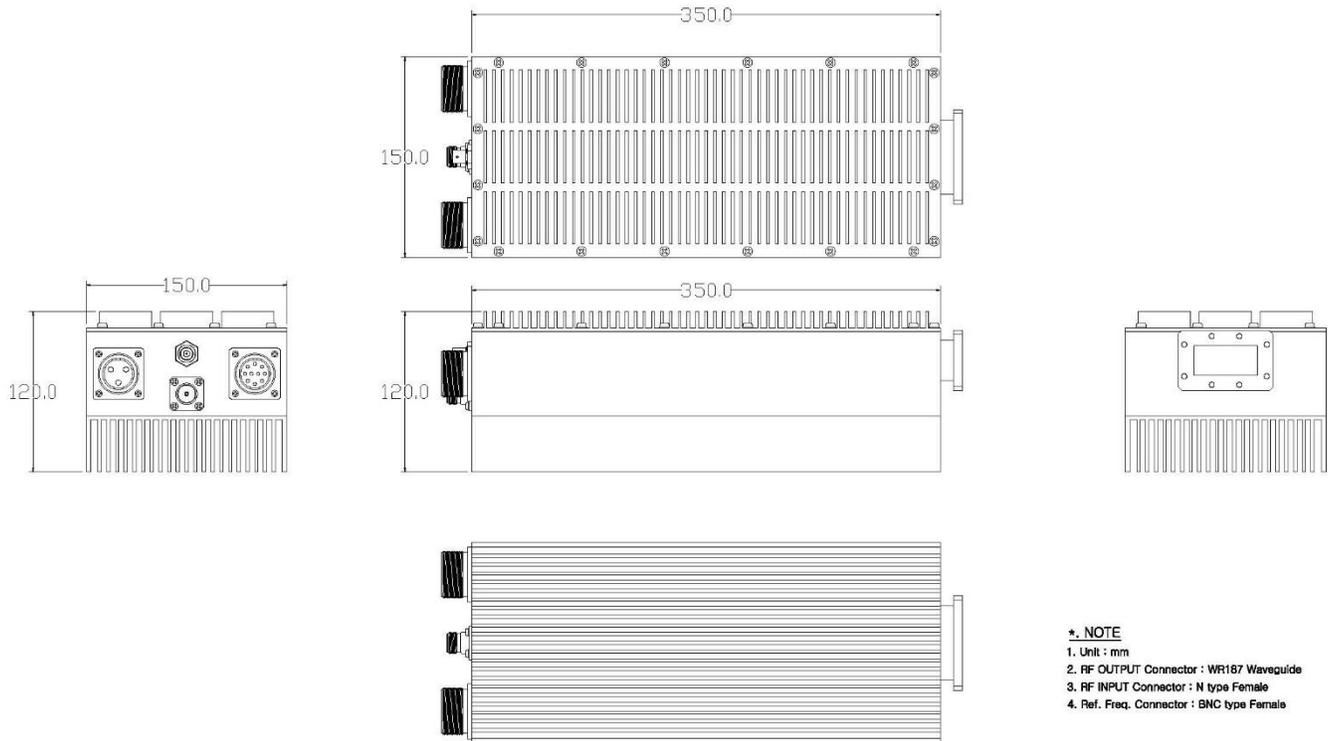
ENVIRONMENTAL CHARACTERISTICS

| Parameter | Specification | Notes |
|----------------------------|---------------|------------|
| Operating Case Temperature | -10 to +50 °C | |
| Storage Temperature | -20 to +85 °C | |
| Relative Humidity | Up to 100 % | Condensing |

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|---|---------------------------------------|----------------------|
| Dimensions | 350 x 150 x 120 mm | Excluding Connectors |
| Weight | 15 Kg. typ | |
| RF Connectors In / Out / Sample | Type-N Female | |
| AC Power / Interface Connector | MS3102 | Or equivalent |
| RS-485/422 Serial port | MS3112E10-6P | |
| TCP-IP/ Ethernet | MS3112 | |
| Cooling | Built in forced air | Variable speed |
| Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP | Ethernet RJ-45 TCP/IP, USB, RS422/485 | |

OUTLINE DRAWIN



Vibration Protection:

designed for normal full motion antenna environment - Vibration: 10-100 Hz @ 2 g (sine) Shock: 20 g (10 ms)

MTBF: 30,000 hrs. min.

MTTR: <2 hrs with spares available

3 year warranty