

**DESCRIPTION**

This class AB GaN Rack Mount is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. These highly versatile units can be custom-configured with an extensive array of monitoring circuitry, control and communication interfaces, and any combination of RF connectors. Custom RF filtering, switching, and multiple PA blocks can be designed in for any system requirement.

**AVAILABLE OPTIONS**

- AC , DC or Dual Power Supplies
- PA and System Redundancy
- Fwd / Reflected Power Monitoring
- High Speed Switching
- Touch Screen Interface
- Monitoring / Control via TTL ,SPI, Ethernet, I<sup>2</sup>C, and other protocol available

**APPLICATIONS**

- Military / Commercial Data links
- Telecommunications
- BTS / Repeaters / DAS
- Test and Measurement
- General Purpose Lab Use

**Tx SPECIFICATIONS**

| PARAMETER                   | MIN                                    | TYP  | MAX  | UNIT |
|-----------------------------|----------------------------------------|------|------|------|
| Operating Frequency         | 800                                    |      | 1000 | MHz  |
| P1dB Power Output           | 36.5                                   | 37.0 |      | dBm  |
| PSat Power Output           | 37.0                                   | 37.5 |      | dBm  |
| Gain                        | 41.0                                   | 42.0 |      | dB   |
| Gain Flatness               |                                        | 0.5  | 0.75 | dB   |
| OIP3                        |                                        | 46.0 |      | dBm  |
| OIP3 Measurement Conditions | 2 Tone @ 27 dBm / Tone, 10 MHz Spacing |      |      | --   |
| Input Return Loss           | 14                                     | 14   |      | dB   |
| AC Supply Voltage           | 85                                     |      | 264  | VAC  |
| Power Consumption           |                                        | 59   |      | W    |
| Tx / Rx Switching Time      |                                        |      | 1.0  | uS   |

**Rx SPECIFICATIONS**

| PARAMETER         | MIN  | TYP   | MAX | UNIT |
|-------------------|------|-------|-----|------|
| P1dB Power Output | 19.0 | 20.0  |     | dBm  |
| Gain              | 19.0 | 20.0  |     | dB   |
| Gain Flatness     |      | 0.3   | 0.5 | dB   |
| Noise Figure      |      | 2.5   | 3.0 |      |
| OIP3              |      | 35.0  |     | dBm  |
| Input Return Loss | 8    | 10    |     | dB   |
| Current Draw      |      | 200.0 |     | mA   |

**MECHANICAL**

| PARAMETER                      | VALUE                                                                                         | UNIT |
|--------------------------------|-----------------------------------------------------------------------------------------------|------|
| Dimensions (L x W x H)         | 12.115 x 18.94 x 3.47                                                                         | in.  |
| RF Connectors (Input / Output) | N-F standard, other configurations available                                                  | --   |
| Power Connector                | IEC 60320-C14 standard, other configurations available                                        | --   |
| Control / Monitoring Connector | Per customer requirement                                                                      |      |
| Cooling                        | Forced air standard, TE cooler and fan-less / liquid / other cooling configurations available | --   |
| Mounting                       | Panel mounting standard, rack slide rails and other configurations available                  | --   |

**ENVIRONMENTAL / PROTECTIONS**

| PARAMETER                        | MIN                                | MAX  | UNIT |
|----------------------------------|------------------------------------|------|------|
| Operating Temp. (Housing Temp.)  | -40                                | +85  | °C   |
| Storage Temp Range               | -60                                | +100 | °C   |
| Humidity Range                   | 0-100                              |      | %    |
| Altitude                         | 0-30,000                           |      | ft.  |
| Shock / Vibration                | MIL-STD-810 and equivalents        |      | --   |
| Max RF Input                     | -1.5                               |      | dBm  |
| Load VSWR @ P1dB                 | Open / Short Output Protection     |      | --   |
| PA Baseplate Shutoff Temperature | User Configurable Alarm / Shutdown |      | --   |

**OUTLINE DRAWINGS**


