



Intech microwaves s.r.l.

Sede Legale e Operativa: Via Giacomo Peroni 400, 00131 Roma (RM) – Italy

Cap. Soc. € 80.000,00 – P.IVA 12934711008 – REA RM1411466

Tel: +39 06 4568 3104 - Email : info@intech-mw.com PEC: intech.microwaves@pec.it

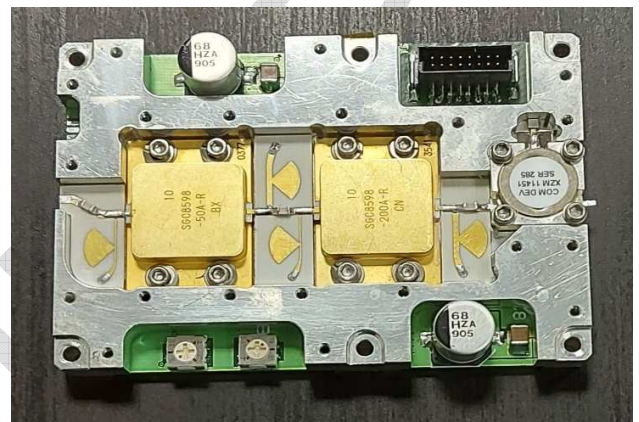
## X-Band Solid State Power Amplifier Module

### 8.5-9.5 GHz, 180 Watts

### MODEL A100433

#### Features:

- ❖ Pulse Applications
- ❖ TWT Replacement
- ❖ Instantaneous 1000 MHz bandwidth
- ❖ Gallium Nitride (GaN) Technology
- ❖ High Output Power Dynamic Range
- ❖ Load VSWR Protection
- ❖ Ideal Building Block for solid state Radar Transmitter and Range Instrumentation Systems
- ❖ ESD Protection IAW EN61000-4-2, MIL-STD-461F, CS101 and CE102



## Performance Specifications

- ❖ Frequency Range: 8.5 to 9.5 GHz
- ❖ Output Power: +52.3 dBm peak
- ❖ Power Gain: 18.5 dB nominal
- ❖ Phase Stability  $\pm 2.0^\circ$  Peak to Peak
- ❖ Duty Cycle: up to 20% DF
- ❖ Input VSWR: <1.5:1
- ❖ Output Load VSWR: <1.5:1
- ❖ Input RF Overdrive: +3 dB Max
- ❖ Harmonics:
  - 2Fo: <-40dBc
  - 3Fo: <-60dBc

- ❖ DC Voltage Input: +50 VDC
- ❖ DC Power Consumption: 50 W avg max
- ❖ RF to DC Efficiency: >25 % typical
- ❖ Operating Temperature: 0°C to +50°C baseplate
- ❖ Operating Humidity: 0 to 95% non-condensing
- ❖ Operating Shock & Vibration: Per Mil-Std-810F
- ❖ Operating Altitude: 10,000 Ft.
- ❖ RF Connectors:
  - RF Input Port: drop-in (or SMA Female)
  - RF Output: drop-in SMA Female

Intech Microwaves introduces a new Gallium Nitride (GaN) amplifier for X-Band applications. This design operates over the full 8.5-9.5 GHz frequency range and is ideal as Building Block for solid state Radar Transmitter and Range Instrumentation Systems, as a TWT replacement. The amplifier has internal DC to DC converters, DC filtering, a circuit able to guarantee pulsed drain current. The small light weight construction makes it suitable to a variety of platforms and environments. Contact our Marketing or local Representatives to discuss how IMW experts can support your next solid state amplifier requirement with its standard or custom designs for L, S, C, and X Band Pulse Radar, TWT replacement, IFF, EW Jamming, Satellite, or Medical Instrumentation.