

The **SPA20** S-Band RF Power Amplifier is a high-performance solid-state power amplifier module. It delivers up to 20 watts across S-band frequencies. The **SPA20** module needs a 10dBm input drive level from the transmitter to generate up to 44dBm / 25 watts across the operating band.

With a high efficiency operation based on state-of-the-art Gallium Nitride (GaN) power amplifier device technology, the SPA20 module is ideal for RF telemetry and military communication systems that require reliability and minimal power consumption.

Contact ADVANTEN about customizing this PA to meet your exact system requirements.

FEATURES

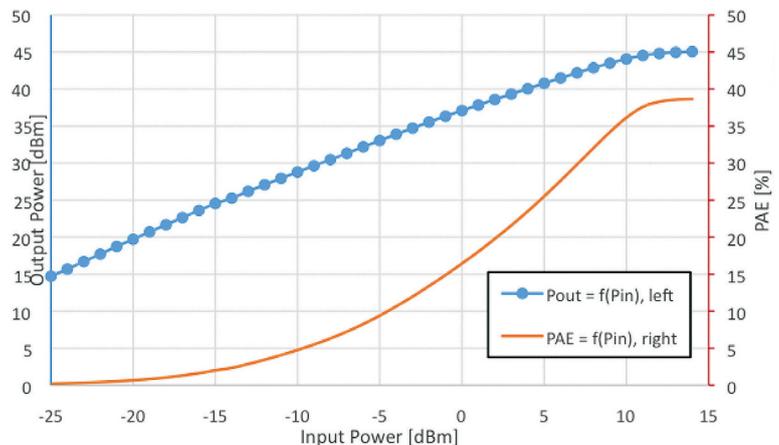
- High efficiency & reliability
- GaN Technology
- High quality case
- Excellent thermal Management with low thermal resistance heat sink
- Tolerance for mismatch (protected by internal circulator)
- Overvoltage and reverse protection (internal fuse)
- Field upgradable firmware,



SPA20

APPLICATIONS

- RF Communication Systems
- S-band RF Telemetry
- Unmanned Aircraft Systems (UAS)
- Unmanned Ground Vehicles (UGV)
- Unmanned Surface Vehicles (USV)
- Test Labs



SPECIFICATIONS

Operating Characteristics

Frequency Range	2.40 - 2.50 GHz (SPA20-D) 2.18 - 2.28 GHz (SPA20-U) Others on request
RF Output Power (CW)	44 dBm / 25 W
RF Gain	34 dB
2nd Harmonic	-45 dBc (max)
Nominal Drive Level (CW)	10 dBm
Maximum Input Drive Level (no damage)	15 dBm
Operating Voltage	+24 to 32 VDC
Current Consumption (CW, 10dBm of input RF power)	2.5 A @ 28 VDC (typ)

Chassis Dimensions	221 x 84 x 50 mm Including heat sink
Weight	1.3 Kg
Operating Temperature	-30 to +70 °C
Storage Temperature	-40 to +85 °C
RF connectors	N type
Power supply connector	Circular connector

