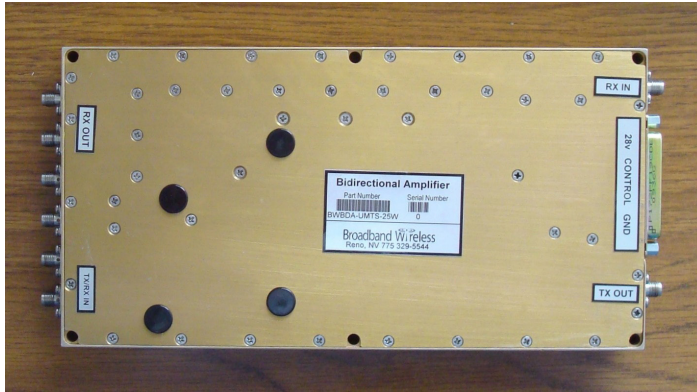


Amplifiers up to 320W and 80 dB gain



Product Description

RF bidirectional amplifiers are critical in both 5G systems and defense communications, enabling efficient two-way signal transmission. They enhance the performance by boosting signals in both uplink and downlink paths, ensuring reliable connectivity. This capability is essential for supporting applications that demand high data rates and low latency. In defense communications, RF bidirectional amplifiers play a vital role in maintaining secure and robust communication channels, allowing for real-time data exchange between various military assets.

Typical Application

- ▶ 2G, 3G, 4G, 5G
- ▶ GSM, CDMA, LTE
- ▶ Base Stations
- ▶ Repeaters
- ▶ Communications Networks

Features

- ▶ High Linearity
- ▶ GaN and LDMOS Technology
- ▶ Class D and Doherty designs
- ▶ Psat up to 320 Watts
- ▶ Thermal Management

Electrical Specifications ($T_A = 25^\circ C$)

Description	UOM	Min	Typical	Max	Notes
Frequency	GHz	.002		6.00	customer to define frequency band
Small Signal Gain	dB			+80	customer defined
Gain Flatness	±dB		TBD		bandwidth dependent
Gain Variation over Temp	±dB			3	
Saturate Power (Psat)	W			320	customer defined
Max Input Power	dBm			10	
Input Dynamic Range	dB	-40		9	customer defined
Harmonics	dBc			-20	
Rise/Fall Time	nS		10		
Spurious Out	dBc			-60	
Input VSWR	:1			1.5	
Output VSWR	:1			1.5	
Voltage Range	VDC	12		48	
Current	mA			TBD	dependent on Psat and VDC