

Trusted RF Solutions.[™]

NuPower Xtender™ 12B04A-05 L- & S-Band Bidirectional Amplifier

16 Watt CW 2.5 Watts Linear, 5% EVM @ 34 dBm 1.435 GHz - 2.395 GHz



P/N: NW-BA-12B04A-05

The NuPower Xtender™ Model NW-BA-12B04A-05 is a small, lightweight, and power-efficient bidirectional amplifier ideal for extending the communication range of half-duplex L- or S-band transceivers running constant-envelope or near-constant-envelope waveforms. The bidirectional amplifier generates 16 Watts of RF power from 1435 to 2395 MHz in transmit mode and the integrated low-noise amplifier provides a minimum of 13 dB of gain in receive mode.



Extend your operational communication range with NuPower™ amplifiers from NuWaves Engineering.



- 16 Watts RF Output Power
- 1.435 to 2.395 GHz
- Bidirectional Operation
- 35 dB of Transmit Gain
- 13 dB Gain LNA
- Fast T/R Mode Switching with Auto-Sensing or Manual T/R Line
- Small Form Factor
- High Efficiency GaN Technology
- Over-Voltage & Reverse-Voltage Protection

Applications

- Unmanned Aircraft Systems (UAS) -Group 2 and Group 3
- Unmanned Ground Vehicles (UGV)
- RF Communication Systems
- Software Defined Radios

NuPower Xtender[™] 12B04A-05 BDA

Specifications

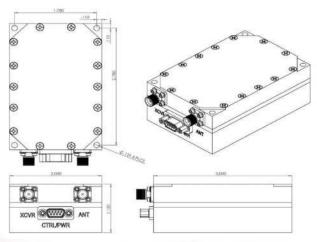
Operational

Frequency Range	1.435 GHz to 2.395 GHz
RF Output Power	16 W (typ)
	11 W (min)
Transmit Gain	35 dB (typ)
2nd Harmonic	≤-13 dBc
T/R Mode	Automatic Sensing or Manual T/R Line
T/R Switch Tlme	1.5 μS (max)
Receive RF Gain	13 dB (min)
Receive Noise Figure	3.5 dB (typ)
Nominal Input Drive Level	+5 dBm
Maximum Input Drive Level (no dama	ge) +10 dBm
Supply Voltage	+11 to +32 VDC
Transmit Current Consumption	2.3 A @ +28 VDC (typ)
Receive Current Consumption	100 mA @ +28 VDC (typ)
RF Connectors	SMA (female)
Interface Connector	9-pin Micro-D (socket)

Mechanical

Size	3.00"x 2.00"x 1.16" (L x W x H)
Weight	5.8 oz.
Environmental	
Environmental	
Operating Temperature	-30 to +60 °C
Storage Temperature	-40 to +85 °C
Export	
Classification	EAR99

Mechanical Outline



Contact NuWaves



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