

Trusted RF Solutions.™

NuPower Xtender[™] 12B04A-06 L-Band Bidirectional Amplifier

18 Watt CW 2.5 Watts Linear, 5% EVM @ 34 dBm 1.5 GHz - 2.0 GHz



P/N: NW-BA-12B04A-06

The NuPower Xtender[™] Model NW-BA-12B04A-06 is a small, lightweight, and powerefficient bidirectional amplifier ideal for extending the communication range of halfduplex L-band transceivers running constant-envelope or near-constant-envelope waveforms. The bidirectional amplifier generates 18 Watts of RF power from 1500 to 2000 MHz in transmit mode and the integrated low-noise amplifier provides a minimum of 13 dB of gain in receive mode.

Based on the latest gallium nitride (GaN) technology, the Xtender offers greater than 30% power efficiency at most frequencies and its compact size makes it ideal for integration into space-constrained platforms. Accepting a +5 dBm RF input, the Xtender provides 35 dB of gain. The Xtender also features over-voltage and reverse-voltage protection and operates over a wide temperature range of -30 to +60 °C.

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

Features

- 18 Watts RF Output Power
- 1.5 to 2.0 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-06 BDA

Specifications

Operational

1.5 GHz to 2.0 GHz
18 W (typ)
14 W (min)
35 dB (typ)
≤-13 dBc
Automatic Sensing or Manual T/R Line
1.5 μS (max)
13 dB (min)
3.5 dB (typ)
+5 dBm
ge) +10 dBm
+11 to +32 VDC
2.3 A @ +28 VDC (typ)
100 mA @ +28 VDC (typ)
SMA (female)
9-pin Micro-D (socket)



Mechanical

Size	3.00" x 2.00" x 1.16" (L x W x H)
Weight	5.8 oz.

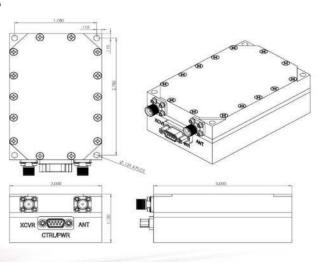
Environmental

Operating Temperature	-30 to +60 °C
Storage Temperature	-40 to +85 °C

Export

Classification	EAR99
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Mechanical Outline



Contact NuWaves



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