

# NuWaves Engineering

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.**

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

- 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

