

## 2.4GHz Bi-Directional In-Line Booster Amplifier

The BDA is capable of both forward and return communications. It improves signal strength and quality of Cable Modem digital communications, Picture quality (analogue/digital), UHF/VHF/FM antenna reception, long cable runs, radio coverage in shadowed areas and inside buildings, GPS and CDMA systems.

It can be installed at the premises to mitigate signal degradation attributed to excessive drop length and the use of multiple Internet, data and telephony services.

Rojone has a series of high quality BDAs, which covers VHF, UHF to 2.4 GHz. Please consult us for your application.

The Bi-Directional Booster Amplifier is ideal to increase the range of 2.4 GHz Wireless LAN devices or radio modems and ideal for preserving the spectral purity of Direct Sequence (DSSS) radios and WLAN devices. **These items are NOT weatherproof.** 

The Kit - part number ROJ-BDA421-240VAC-K consists of (detailed specifications shown below):

1 x AMA-3421-BDA-N-1 Bi-Directional Amplifier Module

1 x AMA-061-2400-5V DC Feed Module

1 x JAY-MP-3230 Plug Pack 5V, 2 amp, 240 VAC, Australian plug

1 x R05-PB3F 3 Pin power connector

Electronic Specifications			
Order Code	BDA	DC Feed	
Frequency Range	2400 – 2500 MHz	2400 – 2500 MHz	
Max. Output RF Power	30 +/- 2dBm (1W)	N/A	
Tx Gain	17 dB +/- 2dB	N/A	
Rx Gain	20 dB +/- 2dB	N/A	
Noise figure of Rx LNA	< 1.8 dB	N/A	
IP3	>33 dBm for Rx > 45 dBm for Tx	N/A	
Max. Input RF	20 dBm for Tx 10 dBm for Rx	N/A	
Switching over time	< 0.5 uS	N/A	
Op. Temp	-40 to +60C	-40 to +85C	
Humidity	Humidity 100%	Humidity 100%	
DC Power Supply	2A average and 2.5A peak @ 5V	5V @ 2A max	
RF Connectors	N-Female	N Female connectors for RF	
		3 Pin Bayonet coupling power	
		connection	
MTBF	>100,000 hours	>100,000 hours	
Impedance	50 Ohms	50 Ohms	
DC thru Resistance	N/A	< 0.02 Ohms	
I/O VSWR	N/A	< 2:1	

## These items are NOT weatherproof.

For environmental outdoor applications, use part number AMA-3421-BDA-N-1W-EN



## **5.8GHz Bi-Directional 1 Watt Amplifier**

New innovation in amplifier technology, low-cost, high-performance 5.8GHz in line coax amplifiers.

The unit's outdoor design features;

- Smallest housing that does not require any mounting
- Its unique design allows for superb heat dissipation
- Field diagnostics and serviceability without tools
- Male/Female gender for ease of insertion
- Aerodynamic design, allows for minium wind resistance





## Part Number WLAN-58AMP-K

Electrical Specifications			
	802.11a 250mw	1W non OFDM	
Operating Range	5725 – 5875 MHz (5.15 ~ 5.25 GHz version available upon request)		
Operating Mode	TDD – Time, Division, duplex		
Transmit Power	250mW	1 watt	
Transmit Gain	10 dB	20 dB	
Transmit Input Power	-3dB min	-3dB min	
	17dB max	15dB max	
Receive Gain	17 dB	17 dB	
Noise Figure	3.5 dB	3.5 dB	
LED indicators (inside	Red for Receive Green for Transmit		
the cover)			
Power Consumption	Rx: 110mA	Rx: 110mA	
	Tx: 850mA @ 6V DC	Tx: 1A @ 6V DC	
Operating Temp	$-40^{\circ}$ C to + $70^{\circ}$ C		

Mechanical Specifications			
	Amplifier	DC Injector	
Dimension	4.1" long, 1.1" diameter	3.5" x 2.2"	
Enclosure	Watertight, machined housing	Indoor, machine AL housing	
Connectors	Type N male/female	Type N Females	
Weight	10 Oz.	6 Oz.	