

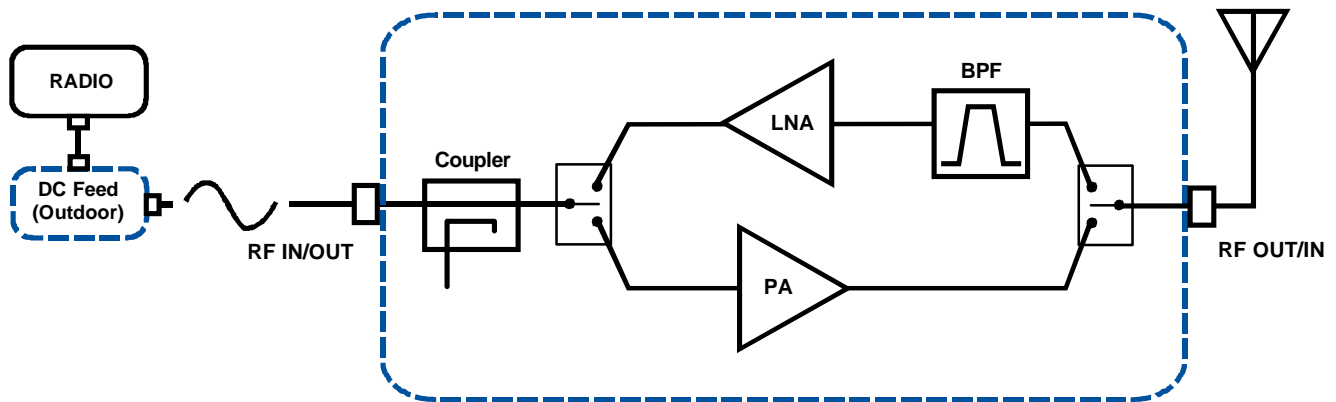


The **Antennafier™ 4900-5800C series** bi-directional amplifier modules are intended for OEM applications where size, performance and cost are optimized. Using an Antennafier™ in front of your 802.11a radio will significantly improve link reliability and operating range by providing Low Noise Amplification in Receive, and Spectrally Clean Power Amplification during Transmit. These fixed gain devices cover 4.9 to 5.8GHz in five popular bands.

#### Featured Highlights:

- Fixed TX & RX Gains
- Transmit P1dBm = +30dBm (1W)
- Low Receive Noise Figure
- High Dynamic Range
- 802.11a compatible
- TX/RX LED Indicator
- Removable Heat Sink
- Automatically senses incoming RF signal

### ANTENNAFIER™ 4900-5800C SERIES BLOCK DIAGRAM



*The marketing, sale, and use of power amplification devices are governed by and subject to Part 15 of the Rules and Regulations of the Federal Communications Commission. Such devices may only be sold to parties assembling certified RF transmission systems consisting of an intentional radiator, an external radio frequency power amplifier, and an antenna.*

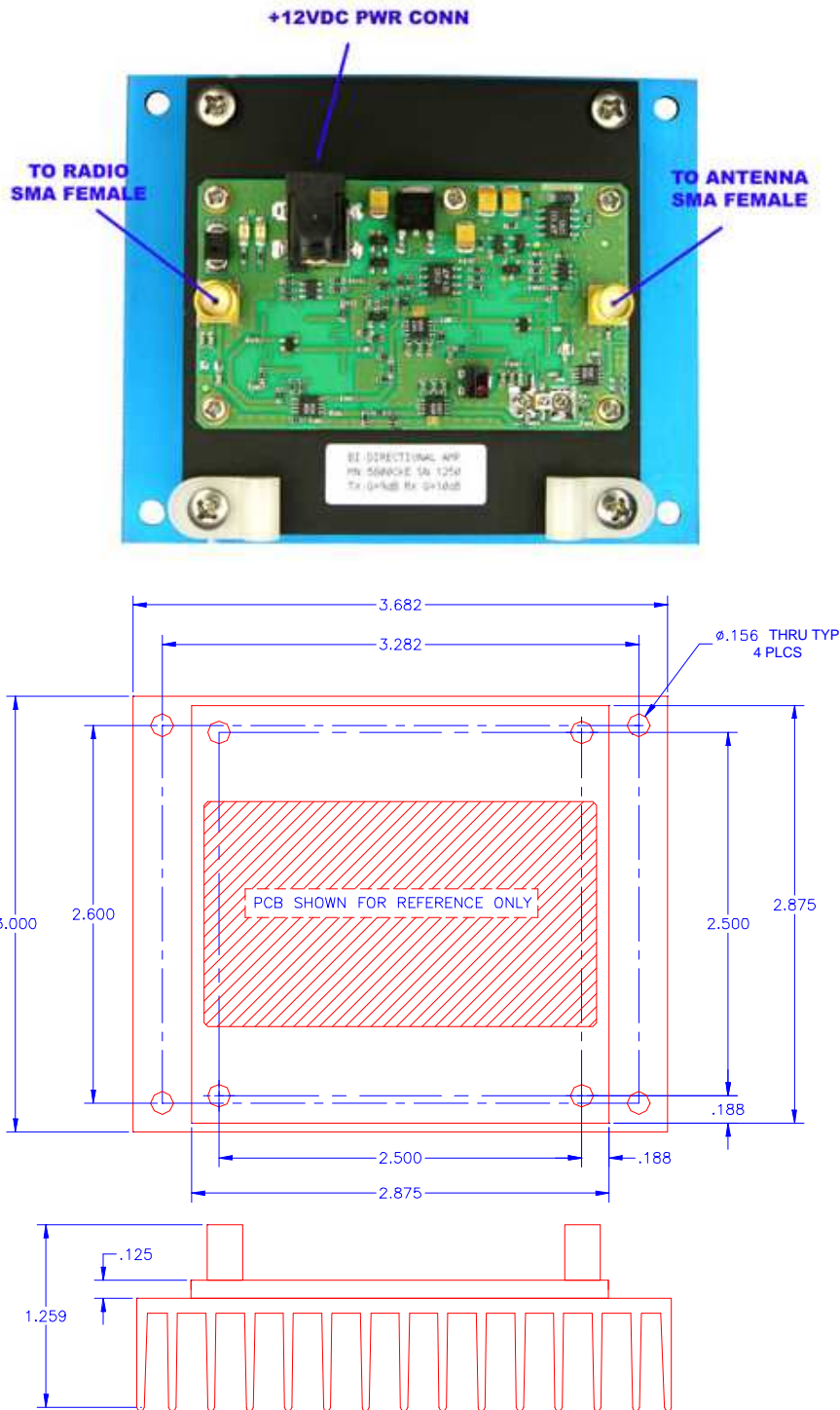
9017 Cincinnati Columbus Rd.  
West Chester, Ohio 45069  
PH: 513-777-2774

## Typical Performance Parameters

<b>Frequency Bands:</b>	Public Safety: 4.940-4.990 GHz U-NII Lower: 5.15-5.25 GHz U-NII Middle: 5.25-5.35 GHz CEPT: 5.47-5.725 GHz U-NII Upper : 5.725-5.825 GHz
<b>Supply Voltage:</b>	+12 VDC +/- 5% DC from Power Jack 2.1mm I.D. (+), 5.5mm O.D. (-)
<b>Receive:</b>	Gain: 10 dB +/- 2 dB Noise Figure: 2.5 dB Supply Current: < 250 mA TX to RX Switching: < 500 nSec
<b>Transmit:</b>	Gain : 9 dB +/- 2 dB Compression Point P1dBm = +30dBm (1W) (we recommend 6dB back-off for OFDM) OFDM 802.11a Power Output +24dBm (250mW yields 54Mbs) +27dBm (500mW yields 36Mbs) RF Input Power for Turn-On: > 1 dBm Harmonic Rejection: 2fo > 50 dBc, 3fo >73dBc @ Power Output Supply Current: < 900 mA RX to TX Switching: < 500 nSec
<b>Maximum Ratings:</b>	Pin (Radio Port) +30 dBm Pin (Antenna Port) +27 dBm
<b>RF Connectors:</b>	"SMA" Female
<b>Size:</b>	2.875" x 2.875" x 0.500"(PCB with 0.090" thick Black Anodized aluminum plate) 3.000" x 3.628" x 1.259"(With added heatsink)
<b>Weight:</b>	< 10 oz
<b>Chassis:</b>	PCB mounted to a 0.090" thick Black Anodized Aluminum Plate
<b>Indicator LED:</b>	Green—Receive Mode, Red -Transmit Mode
<b>Lightning Suppression:</b>	1/4 wavelength short
<b>Temperature:</b>	-40 to +70 Deg C

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## Mechanical Footprint and Hookup:



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## ANTENNAFIER™ Ordering Guide

<u>Indoor Series</u>	<u>Freq Band</u>	<u>Description</u>
4900 CKE	4940-4990 GHz Public Safety Band	Includes: Amplifier, Heat Sink, Cable Stays & 12VDC Wall Mount Power Supply. Pigtail Cables Sold Separately.
5200 CKE	5.15-5.25GHz U-NII Lower Band	
5300 CKE	5.25-5.35 GHz U-NII Middle Band	
5600 CKE	5.47-5.725 GHz CEPT	
5800 CKE	5.725-5.825GHz U-NII Upper Band	

- Use designator “U” in tail end of Part Number to denote user specified gains, also specify TX and RX gain in dB

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