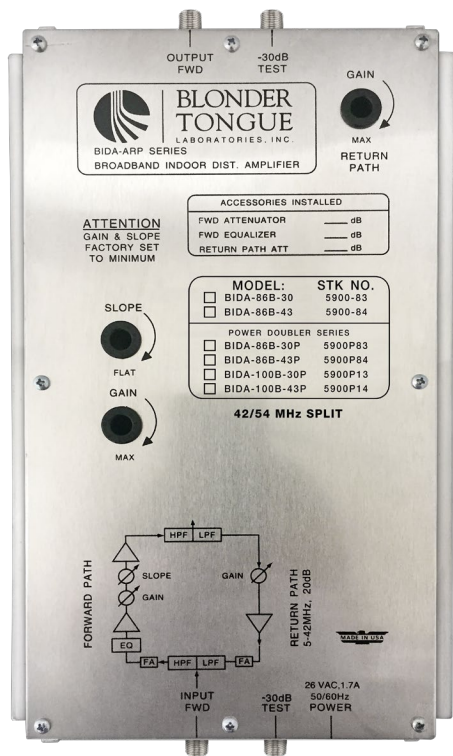


**BIDA SERIES**  
**BROADBAND AMPLIFIERS**



**BIDA 5900 SERIES**

TWO-WAY BROADBAND INDOOR DISTRIBUTION AMPLIFIERS  
WITH ACTIVE RETURN PATH



**KEY FEATURES**

- » Push-Pull and Power-Doubling Hybrid Models Available
- » Hybrid IC Circuitry for High Output with Low Distortion
- » Easily Adjustable Front Panel Gain and Slope Controls
- » Optional Plug-in Fixed Equalizer and Attenuator Capability for Input Signal Conditioning
- » Integrated Return Path Configurable for either Passive or Active Operation
- » Input and Output Test Ports
- » Large Heat Sinks for Exceptional Heat Dissipation

**PRODUCT OVERVIEW**

The **BIDA 5900 Series** with Active Return Path is a completely self-contained broadband indoor distribution amplifier designed for CATV and SMATV signal distribution systems. Push-Pull and Power-Doubling hybrid amplifier technologies are available for the BIDA 5900 Series with RF bandwidths ranging from 54-860/1000 MHz with 30 or 43 dB gains.

All BIDA 5900 models have a return path bandwidth of 5-42 MHz and can be configured for either a passive (factory default) or integrated active return. When field configured to an active return, the BIDA 5900 Series have a full gain of 20 dB. All models can be attenuated over a range of 10 dB in the forward path and 18 dB in the return path. Gain and slope controls are located on the front panel for easy set-up and adjustment. Two -30 dB back-matched test points are provided to permit testing without interruption of service.

The aluminum chassis is designed to provide excellent heat dissipation thus allowing operation at high ambient temperatures with no degradation of performance or reliability.

# BIDA 5900 SERIES

## SPECIFICATIONS



## SPECIFICATIONS AND ORDERING INFORMATION

5900 MODEL SKU#	86B-30 5900 83	86B-30P 5900P83	86B-43 5900 84	86B-43P 5900P84	100B-30P 5900P13	100B-43P 5900P14	INTEGRATED ACTIVE RETURN PATH
Frequency Range	54-860 MHz		54-860 MHz		54-1000 MHz		5-42 MHz
Gain	30 dB		43 dB		30 dB	43 dB	20 dB (passive -1.5)
Flatness	±0.75 dB		±0.75 dB		±0.75 dB		±0.5§
Gain Control Range	10 dB		10 dB		10 dB		18 dB
Slope Control Range	8 dB		8 dB		8 dB		-
Input Return Loss	16 dB		16 dB		16 dB		-
Output Return Loss	16 dB		16 dB		16 dB		-
Noise Figure	8.5 dB		8.5 dB		8.5 dB		6.0 dB
No. of Channels (for CSO, CTB, & XMD)	129		129		150		3
Output Level	36/44 dBmV		36/44 dBmV		32/40 dBmV		42 dBmV
Composite Triple Beat (CTB)	-54 dB	-62 dB	-56 dB	-60 dB	-70 dB		-60 dB
Cross-modulation (XMOD)	-54 dB	-62 dB	-60 dB	-65 dB	-66 dB		-60 dB
2nd Order Composite (CSO)	-57 dB	-61 dB	-59 dB		-69 dB		-60 dB
Impedance	75 Ω						
Hum Modulation	70 dB						
In/Out Test Port Level	-30 dB; ±2 dB						
In/Out Test Port Return Loss	20 dB						
Operating Temp. Range	-20 to +60 °C						
Power Requirements	Wall Power Transformer: 105-130 VAC, 60 Hz, 0.38A Max						
Dimensions (L x W x H)	10.5" x 7.25" x 3.25" (26.4 cm x 18.42 cm x 8.26 cm)						
Shipping Weight	6 lbs (2.7kg)						
<b>PLUG-IN ACCESSORIES</b>							
1) Flat Attenuator (1-20 dB in 1 dB steps)	sku: 5411A-(*)						
2) Cable Equalizer (3, 6, 9, 12, 15, 18 dB)	sku: 5478-(*)				sku: 5479-(*)		

§ Reference to +1 dB tilt

(\* Specify dB

# BIDA 5900 SERIES

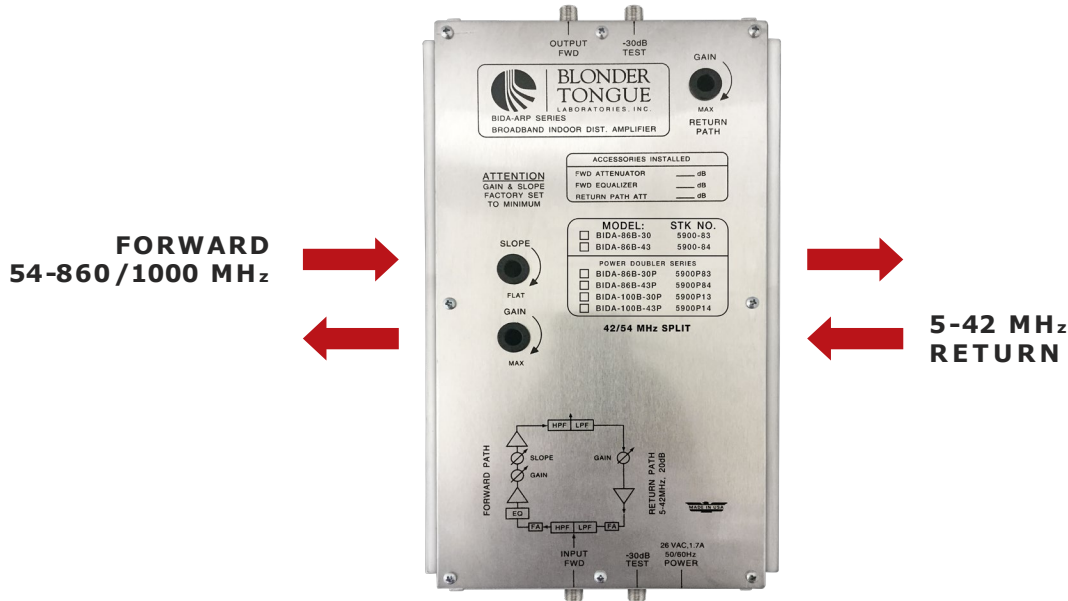
I/O CONNECTIONS



# BIDA 5900 SERIES

TWO-WAY BROADBAND INDOOR DISTRIBUTION AMPLIFIER WITH ACTIVE RETURN PATH

## I/O OVERVIEW



## ORDERING INFORMATION



MODEL	STOCK #	DESCRIPTION
BIDA 86B-30	<b>5900 83</b>	Broadband Indoor Distribution Amplifier 30 dB, 54-860 MHz, Push-Pull, Active Return (5-42 MHz)
BIDA 86B-30P	<b>5900P83</b>	Broadband Indoor Distribution Amplifier 30 dB, 54-860 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 86B-43	<b>5900 84</b>	Broadband Indoor Distribution Amplifier 44 dB, 54-860 MHz, Push-Pull, Active Return (5-42 MHz)
BIDA 86B-43P	<b>5900P84</b>	Broadband Indoor Distribution Amplifier 44 dB, 54-860 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 100B-30P	<b>5900P13</b>	Broadband Indoor Distribution Amplifier 30 dB, 54-1000 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 100B-43P	<b>5900P14</b>	Broadband Indoor Distribution Amplifier 43 dB, 54-1000 MHz, Power-Doubling, Active Return (5-42 MHz)

ACCESSORIES		
BIDA-CE-8	<b>5478</b>	BIDA Series Plug-In Cable Equalizer 860 MHz, Values: 3,6,9,12,15,18 dB
BIDA-CE-10	<b>5479</b>	BIDA Series Plug-In Cable Equalizer 1000 MHz, Values: 3,6,9,12,15,18 dB
BIDA-FA	<b>5411A</b>	BIDA Series Plug-In Fixed Attenuator 1000 MHz, Values: 1-20 dB