

# **BIDA 5900 Series** Two-Way Broadband Distribution Amplifiers w/ Active Return Path

# SOLUTIONS FOR ALL YOUR APPLICATIONS

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 that use a cable drop as a signal source.

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 <u>passive</u> (factory default) or integrated <u>active return</u>. 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.



#### **Features**

- Provides Two-Way Capability with an Passive or Active Return Path Set by Field-Changeable Jumpers
- Easily Adjustable Front Panel Gain and Slope Controls
- Hybrid IC Circuitry for High Output with Low Distortion
- Optional Plug-in Fixed Equalizer and Attenuator Capability for Input Signal Conditioning
- Integrated Return Path Configurable for either Passive or Active Operation
- Push-pull and Powering-doubling Hybrid Models Available
- Input and Output Test Ports
- Large Heat Sinks for Exceptional Heat Dissipation

### **Specifications**

Model: BIDA-5900 Stock No:	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				54-100	54-1000 MHz	
Gain:	30 dB		43 dB		30 dB	43 dB	20 (Passive -1.5)
Flatness:	±0.75 dB		±0.75 dB		±0.75 dB		±0.5§
Gain Control Range:	10 dB						
Slope Control Range:	8 dB						
Input Return Loss:	16 dB						
Output Return Loss:	16 dB						
Noise Figure:	8.5 dB					6.0	
No. of Channels (for CSO, CTB, & XMD):	129 150					0	3
Output Level:	36/44 dBmV					32/40 dBmV	
Composite Triple Beat (СТВ):	-54 dB	-62 dB	-56 dB	-60 dB	-70	dB	-60
Cross-modulation (XMOD):	-54 dB	-62 dB	-60 dB	-65 dB	-66	dB	-60
2nd Order Composite (CSO):	-57 dB	-61 dB	-59	-59 dB -69 dB		-60	
Impedance:	75 Ω						
Hum Modulation:	70 dB						
Input/Output Test Port Level:	-30 dB; ±2 dB						
Input/Output Test Port Return Loss:	20 dB						
Operating Temperature Range:	-20 to +60 °C						
Power Requirements:	Wall Power Transformer 105-130 VAC, 60 Hz 0.38 AMP Max						
Dimensions (LxWxH):	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)						
Plug-In Accessories:							
1) Flat Attenuator (1-20 dB in 1 dB steps)	#5411A-(*)						
2) Cable Equalizer: (3,6,9,12,15,18 dB)	#5478-(*) #5479-(*)						

(\*) Specify dB § Reference to +1 dB tilt

### **Ordering Information**

Model	Stock #	Description
BIDA 86B-30	5900 83	Broadband Indoor Distribution Amplifier 30 dB, 54-860 MHz, Push-Pull, Active Return (5-42 MHz)
BIDA 86B-30P	5900P83	Broadband Indoor Distribution Amplifier 30 dB, 54-860 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 86B-43	5900 84	Broadband Indoor Distribution Amplifier 44 dB, 54-860 MHz, Push-Pull, Active Return (5-42 MHz)
BIDA 86B-43P	5900P84	Broadband Indoor Distribution Amplifier 44 dB, 54-860 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 100B-30P	5900P13	Broadband Indoor Distribution Amplifier 30 dB, 54-1000 MHz, Power-Doubling, Active Return (5-42 MHz)
BIDA 100B-43P	5900P14	Broadband Indoor Distribution Amplifier 43 dB, 54-1000 MHz, Power-Doubling, Active Return (5-42 MHz)

#### Accessories

Model	Stock #	Description
BIDA-CE-8	5478	BIDA Series Plug-In Cable Equalizer 860 MHz, Values: 3,6,9,12,15,18 dB
BIDA-CE-10	5479	BIDA Series Plug-In Cable Equalizer 1000 MHz, Values: 3,6,9,12,15,18 dB
BIDA-FA	5411A	BIDA Series Plug-In Fixed Attenuator 1000 MHz, Values: 1-20 dB