



Blonder Tongue

BIDA-5800

Broadband Indoor Distribution Amplifiers - Active Return Path

SOLUTIONS FOR ALL YOUR APPLICATIONS

The Blonder Tongue BIDA-ARP is a completely self-contained broadband indoor distribution amplifier designed specifically for CATV and SMATV signal distribution systems which use a cable drop as a signal source. Seventeen models are available with bandwidths ranging from 49-550 MHz to 49-1000 MHz, gains of either 30 dB or 43 dB, and push-pull or power doubling hybrid technology.

All models have a return path bandwidth of 5-36 MHz and can be configured for either a passive (as shipped) or active return. When field configured to an active return the BIDA-ARP 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 backmatched test points are provided to permit testing without interruption of service.

In applications where input signals are too high or where greater cable equalization is necessary, the BIDA-ARP can be reconfigured by using plug-in fixed attenuators (forward and return) and cable slope equalizers (forward) to meet particular requirements.

Push-pull and power doubling hybrid modules, hybrid IC modules enable the BIDA-ARP to operate at high output levels while retaining low distortion characteristics.

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

Forward

49-550/750/860/1000 MHz →



← 5-36 MHz Return

Features

- Provides Two-Way Capability with an Active or Passive Return Path Set by Field-Changeable Jumpers.
- Hybrid IC Circuitry for High Output with Low Distortion.
- Front Panel Gain and Slope Controls for Easy Adjustments.
- Sockets for Hybrid IC to Make a Hybrid IC Change in the Field.
- Forward Path Input-Side Plug-In Fixed Attenuator and Cable Equalizer for Optimum Performance.
- Return Path Output-Side Fixed Attenuator for Optimum Performance.
- Externally Accessible Test Points Permit In-Service Testing.
- Exceeds FCC Specs for Both Conducted and Radiated Interference at Full Output Level.
- External "UL Listed" Power Transformer.

Please see other side for ordering information.

Rev: 092214 (651187000P)

Specifications

Model: BIDA-ARP Stock No:	55A-30 5800-53	55A-30P 5800P53	55A-43 5800-54	55A-43P 5800P54	55A-50 5800-55	75A-30 5800-73	75A-30P 5800P73	75A-43 5800-74	75A-43P 5800P74	86A-30 5800-83	86A-30P 5800P83	86A-43 5800-84	86A-43P 5800P84	100A-30 5800-13	100A-30P 5800P13	100A-43 5800-14	100A-43P 5800P14	Integrated Active Return Path	
Frequency Range:	49-550 MHz					49-750 MHz				49-860 MHz				49-1000 MHz				5-36	
Gain:	30 dB	30 dB	43 dB	43 dB	50 dB	30 dB	30 dB	43 dB	43 dB	30 dB	30 dB	43 dB	43 dB	30 dB	30 dB	43 dB	43 dB	20 dB	
Flatness:	±0.50 dB				±0.75 dB	±0.70 dB				±0.75 dB				±0.75 dB				±0.5§	
Gain Control Range:	10 dB																		18
Slope Control Range:	8 dB																		N/A
Input Return Loss:	16 dB																		16
Output Return Loss:	16 dB																		16
Noise Figure:	7 dB			7.5 dB	8.5 dB					8.5 dB				8.5 dB				6.0	
No. of Channels (for CSO, CTB, & XMD):	77					110				129				150				3	
Output Level:	36/44 dBmV					36/44 dBmV				36/44 dBmV				32/40 dBmV				42	
Composite Triple Beat (CTB):	-64 dB	-71 dB	-63 dB	-68 dB	-63 dB	-60 dB	-64 dB	-56 dB	-64 dB	-54 dB	-62 dB	-56 dB	-60 dB	-59 dB	-70 dB	-65 dB	-70 dB	-60	
Crossmodulation (XMOD):	-67 dB	-74 dB	-66 dB	-69 dB	-60 dB	-62 dB	-68 dB	-60 dB	-68 dB	-54 dB	-62 dB	-60 dB	-65 dB	-60 dB	-66 dB	-58 dB	-66 dB	-60	
2nd Order Composite (CSO):	-61 dB	-65 dB	-60 dB	-58 dB	-65 dB	-56 dB	-61 dB	-59 dB	-61 dB	-57 dB	-61 dB	-59 dB	-59 dB	-59 dB	-69 dB	-63 dB	-69 dB	-60	
Impedance:	75 Ω																		
Hum Modulation:	-70 dB																		-65 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 (LxWxD):	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: (1-20dB in 1dB steps)	#5411A-(*)																		
2) Cable Equalizer: (3,6,9,12,15,18 dB)	#5475-(*)					#5477-(*)				#5478-(*)				#5479-(*)					

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

Ordering Information

Model	Stock #	Description
BIDA 55A-30	5800 53	Broadband Indoor Distribution Amplifier 30 dB, 49-550 MHz, Integrated Active Return (5-36 MHz)
BIDA 55A-30P	5800P53	Broadband Indoor Distribution Amplifier 30 dB, 49-550 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 55A-43	5800 54	Broadband Indoor Distribution Amplifier 43 dB, 49-550 MHz, Integrated Active Return (5-36 MHz)
BIDA 55A-43P	5800P54	Broadband Indoor Distribution Amplifier 43 dB, 49-550 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 55A-50	5800 55	Broadband Indoor Distribution Amplifier 50 dB, 49-550 MHz, Integrated Active Return (5-36 MHz)
BIDA 75A-30	5800 73	Broadband Indoor Distribution Amplifier 30 dB, 49-750 MHz, Integrated Active Return (5-36 MHz)
BIDA 75A-30P	5800P73	Broadband Indoor Distribution Amplifier 30 dB, 49-750 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 75A-43	5800 74	Broadband Indoor Distribution Amplifier 43 dB, 49-750 MHz, Integrated Active Return (5-36 MHz)
BIDA 75A-43P	5800P74	Broadband Indoor Distribution Amplifier 43 dB, 49-750 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 86A-30	5800 83	Broadband Indoor Distribution Amplifier 30 dB, 49-860 MHz, Integrated Active Return (5-36 MHz)
BIDA 86A-30P	5800P83	Broadband Indoor Distribution Amplifier 30 dB, 49-860 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 86A-43	5800 84	Broadband Indoor Distribution Amplifier 43 dB, 49-860 MHz, Integrated Active Return (5-36 MHz)
BIDA 86A-43P	5800P84	Broadband Indoor Distribution Amplifier 43 dB, 49-860 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 100A-30	5800 13	Broadband Indoor Distribution Amplifier 30 dB, 49-1000 MHz, Integrated Active Return (5-36 MHz)
BIDA 100A-30P	5800P13	Broadband Indoor Distribution Amplifier 30 dB, 49-1000 MHz, Power Doubling, Active Return (5-36 MHz)
BIDA 100A-43	5800 14	Broadband Indoor Distribution Amplifier 43 dB, 49-1000 MHz, Integrated Active Return (5-36 MHz)
BIDA 100A-43P	5800P14	Broadband Indoor Distribution Amplifier 43 dB, 49-1000 MHz, Power Doubling, Active Return (5-36 MHz)

Accessories

Model	Stock #	Description
BIDA-CE-5	5475	BIDA Series Plug-In Cable Equalizer 550 MHz, Values: 3,6,9,12,15,18 dB
BIDA-CE-7	5477	BIDA Series Plug-In Cable Equalizer 750 MHz, Values: 3,6,9,12,15,18 dB
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: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20 dB