

Broadband Distribution Amplifiers

BIDA 5400 Series



The BIDA 5400 Series are professional quality, broadband, two-way capable, indoor hybrid distribution amplifiers. These amplifiers are ideal for multi-channel RF distribution systems for which the input source is a “cable drop” or the output of a MATV/SMATV/CATV headend.

The BIDA-5400 Series is available in either 550 or 750 MHz bandwidths with push-pull hybrid technology. For 2-way operation, optional field installable diplexers and return amplifiers are used to provide either an active or passive 5-30 MHz return. Passive return configurations require only the diplexers, whereas active return requires installation of both the diplexers and the amplifier.

○ Features & Benefits

- 5-30 MHz Return Capability With Optional Plug-ins
- Dual Push Pull Hybrid Modules
- Interstage Variable Gain and Slope Controls
- Optional Plug-in Fixed Equalizer and Attenuator Capability For Input Signal Conditioning
- Input and Output Test Ports
- Large Heat Sinks for Exceptional Heat Dissipation

○ Specifications

General

Power Requirements
Frequency: 60 Hz
Voltage: 117, $\pm 10\%$ VAC
Power: 21 W
Fuse: 3/8 A
Temperature Range ($^{\circ}\text{C}$):
-20 to +60

Indicators

Power On: LED, Red

Controls

Gain: Control; Slope: Control

Mechanical

Dimensions (W x H x D):
7.13 x 11.50 x 2.68 in.
181 x 292 x 68 mm
Weight:
5.75 lb., 2.61 kg

Connectors

RF Input: "F", Female
RF Output: "F", Female
Input Test Port: "F", Female
Output Test Port: "F", Female

○ Specifications

RF	BIDA-RF		BIDA-RA	BIDA 550-30	BIDA 550-50	BIDA 750-30
	Low	High				
Frequency Range (MHz):	5-30	47-800	5-30	47-550	47-550	47-750
Channel Loading	-	-	3	77	77	110
Flatness (dB):	± 0.25	± 0.25	± 0.50	± 0.75	± 0.75	± 1
Hybrid Technology (dB):				Push-Pull	Push-Pull	Push-Pull
Gain (dB):	-0.50	-0.50	24	33	50	31
Noise Figure (dB) (a):	-	-	6.0	7.0	7.0	9.0
Output Level - Max (dBmV):	-	-	+42	36/44	36/44	36/44
Test Port Level (dB):	-	-	-	-30, ± 2	-30, ± 2	-30, ± 2
Gain Control Range (dB):	-	-	≥ 12	15	15	15
Slope Control Range (dB):	-	-	≥ 12	10	10	10
Composite Triple Beat - CTB (dB) (b):	-	-	-60	-64	-64	-60
Cross Modulation -XMOD (dB) (b):	-	-	-60	-64	-64	-61
Composite Second Order - CSO (dB) (b):	-	-	-72	-64	-64	-61
Hum Modulation (dB):	-	-	-65	-70	-70	-70
Impedance -All Ports (Ω):	-	-	-	75	75	75
Return Loss						
Input (dB):	21	16	16	14	14	13
Output (dB):	21	16	16	14	14	13

Notes

(a) Measured at full gain with 0 dB slope

(b) At rated output capability and channel loading

○ Ordering Information

Model	Stock No.	Description
BIDA 550-30	5400 53	Broadband Indoor Distribution Amplifier 30 dB, 47-550 MHz
BIDA 550-50	5400 55	Broadband Indoor Distribution Amplifier 50 dB, 47-550 MHz
BIDA 750-30	5400 73	Broadband Indoor Distribution Amplifier 30 dB, 47-750 MHz
Accessories		
BIDA-RF	54071	BIDA Series Plug-In Return Filter, 5-30 MHz NOTE: For 5400 Series Amplifiers Only
BIDA-RA	5402	BIDA Series Amplifier, 5-30 MHz NOTE: For 5400 Series Amplifiers Only