

# BIDA 5400 Series

## Broadband Distribution Amplifier



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

### ○ Common Specifications

#### General

Power Requirements  
 Frequency: 60 Hz  
 Voltage: 117, ±10% VAC  
 Power: 21 W  
 Fuse: 3/8 A  
 Temperature Range (°C):  
 -20 to +60

#### Indicators (Side Panel)

Power On: LED, red

#### Controls (Top Panel)

Gain: Control  
 Slope: Control

#### Mechanical

Dimensions (WxHxD):  
 7.13 x 11.50 x 2.68 in  
 181 x 292 x 68 mm  
 Weight:  
 5.75 lb  
 2.61kg

#### Connectors (Side Panel)

RF Input: Type "F", female  
 RF Output: Type "F", female

#### Connectors (Side Panel)

Input Test Port: Type "F", female  
 Output Test Port: Type "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	±1.00
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
Impedence -All Ports (Ohm):	-	-	-	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 8 dB slope

(b) At rated output capability and channel loading