

# Broadband Outdoor Distribution Amplifiers

BODA



Designed with a cast- aluminum housing, the BODA is ideal for outdoor pedestal as well as indoor back board installations. The housing utilizes a carbonized rubber and wire mesh gasket to provide excellent protection against RFI and moisture ingress. 5/8 inch entry fittings in the housing allow hard line cable to connect directly to the amplifier. For RG-11 or RG-6 cabling applications, two KS-F adapters are included to provide input and output “F” connections. The amplifier has flexible powering features. For indoor mounting the supplied external 60 VAC power supply is connected to the BODA’s auxiliary power “F” connector using flexible coax. This feature permits remote powering, so the amplifier can be installed in a desired location for optimum performance without a need for an electrical outlet nearby. Powering can also be accomplished using 60/90 VAC CATV network powering. By changing internal jumpers, the BODA can accept power from its input or output and either stop or pass power through.

## ○ Features & Benefits

- 860 and 1000 MHz Power Doubling Hybrid Technology
- Cast Aluminum Housing for Outdoor or Indoor Mounting
- 42/54 MHz Split
- -20 dB Directional Coupler Test Points
- Powering Versatility
- Integrated Active Return (defeatable)
- Forward Path Interstage Variable Gain and Slope Controls
- Optional Forward Fixed Equalizer and Attenuator Plug-ins for Input Conditioning
- Reverse Path Variable Gain Control with Provision for Optional Fixed Attenuator

## ○ Specifications

| RF                              | 86A - Forward | 86A - Reverse           | 100A - Forward |
|---------------------------------|---------------|-------------------------|----------------|
| Frequency Range:                | 54-860 MHz    | 5-42 MHz                | 54-1000 MHz    |
| Channel Loading:                | 129           | 6                       | 150            |
| Gain (model dependent):         | 30/40 dB      | 20 dB (-4.0 dB Passive) | 30 dB          |
| Gain Control Range:             | 10 dB         | 10 dB                   | 10 dB          |
| Noise Figure:                   | 9.0 dB        | 7.0 dB                  | 9.0 dB         |
| Output Level:                   | 36/44 dBmV    | 48 dBmV                 | 36/44 dBmV     |
| Slope Control Range:            | 8 dB          | -                       | 8 dB           |
| Composite Triple Beat (CTB):    | -62 dB        | -73 dB                  | -62 dB         |
| Cross Modulation (XMOD):        | -62 dB        | -61 dB                  | -61 dB         |
| Composite Second Order (CSO):   | -61 dB        | -                       | -61 dB         |
| Hum Modulation                  | >70 dB        | > 60 dB                 | > 70 dB        |
| AC Through Current: 6 Amps Max. |               |                         |                |
| Power Requirements:             |               |                         |                |
| 825 mA @ 40 VAC                 |               |                         |                |
| 550 mA @ 60 VAC                 |               |                         |                |
| 400 mA @ 90 VAC                 |               |                         |                |
| Temperature:                    |               |                         |                |
| -40 to 60° C                    |               |                         |                |

### Mechanical

Dimensions (L x W x H):  
 10 x 7.75 x 3.13 in.  
 254 x 196.85 x 79.38 mm

Weight:  
 5.75 lbs. Amplifier (2.5 lbs. Ext. PS)  
 2.61 kg

## ○ Ordering Information

| Model         | Stock No. | Description   |
|---------------|-----------|---|
| BODA-86A-30P  | 5300P83   | Broadband Outdoor/Indoor Distribution Amplifier 30 dB, 54-860 MHz, Integrated Active Return (5-42 MHz)  |
| BODA-86A-40P  | 5300P84   | Broadband Outdoor/Indoor Distribution Amplifier 40 dB, 54-860 MHz, Integrated Active Return (5-42 MHz)  |
| BODA-100A-30P | 5300P13   | Broadband Outdoor/Indoor Distribution Amplifier 30 dB, 54-1000 MHz, Integrated Active Return (5-42 MHz) |

### Accessories

|           |       |   |
|-----------|-------|---|
| VMI-CEQ8V | 9377A | Equalizer, Plug-In, 860 MHz, Values 0-20 dB in 1 dB steps       |
| VMI-CEQ1V | 9379A | Equalizer, Plug-In, 1000 MHz, Values 3, 6, 9, 12, 15, and 18 dB |
| VMI-AT    | 9320  | Attenuator, Plug-In, Values 0-18 dB in 1 dB steps               |