

Headend Distribution Amplifiers

HDA



Digital

○ Features & Benefits

- Fully Integrated Digital and Analog Combiner and Distribution Amplifier
- Front Panel Accessible Gain and Slope Controls
- Combiner Attenuator for Adjustment Control of Digital Signals
- State of the Art Hybrid IC Circuitry for High Output with Low Distortion
- Can Be Used As A Combiner & Amplifier or Amplifier & Splitter

The HDA Series of 19" rack mount headend distribution amplifiers are completely self-contained broadband devices, specifically designed for the distribution of digital and analog CATV signals in the frequency range from 47 to 860 MHz. The HDA is unique in the fact that it integrates the abilities of a passive combiner and a distribution amplifier into a single high performance unit.

State of the art hybrid power doubling amplifier modules enable the unit to operate at high output levels while maintaining low distortion characteristics. Four combiner configurations of 16, 12, 8 and 4 ports are available. A -30 dB low-level back matched test port is externally accessible enabling easy in-service testing and adjustment. The chassis design affords excellent heat dissipation allowing operation at high ambient temperatures without sacrificing reliability. Plus, the HDA has a built-in standby power supply with automatic switching capabilities.

Headend Distribution Amplifiers

HDA Series

○ Specifications

Model Stock No.	HDA-16-860-16 6240-16	HDA-12-860-18 6240-12	HDA-8-860-20 6240-08	HDA-4-860-24 6240-04
Frequency Range:	47-860 dB	47-860 dB	47-860 dB	47-860 dB
Gain:	17 dB	19 dB	22 dB	25 dB
Flatness:	±1.0 dB	±1.0 dB	±1.0 dB	±1.0 dB
Gain Control Range:	15 dB	15 dB	15 dB	15 dB
Slope Control Range:	10 dB	10 dB	10 dB	10 dB
Input Return Loss:	14 dB	14 dB	14 dB	14 dB
Output Return Loss:	14 dB	14 dB	14 dB	14 dB
Noise Figure	7.0 dB	7.0 dB	7.0 dB	7.0 dB
No. of channels (Loading):	78	78	78	78
Output Level:	40/46 dBmV	38/44 dBmV	38/44 dBmV	38/44 dBmV
Composite Triple Beat (CTB):	-68 dB	-68 dB	-68 dB	-68 dB
Crossmodulation (XMOD):	-69 dB	-69 dB	-69 dB	-69 dB
Composite 2nd Order (CSO):	-65 dB	-65 dB	-65 dB	-65 dB
Hum Modulation:	-65 dB	-65 dB	-65 dB	-65 dB
Input/Output Test Point Level:	-30 dB	-30 dB	-30 dB	-30 dB
Operating Temperature Range:	0 to +50 °C	0 to +50 °C	0 to +50 °C	0 to +50 °C
Number of Hybrids:	2	2	2	2
Type of Hybrids:	Power Doubling	Power Doubling	Power Doubling	Power Doubling
Power Requirements:	105-130 VAC	105-130 VAC	105-130 VAC	105-130 VAC
Power Consumption:	23.5 W	23.5 W	23.5 W	23.5 W

Dimensions: 19" W x 13 3/4" H x 10 3/4" D

Shipping Weight: 8 lbs.

RF Connectors "F" Type

Combiner Section Specifications

Insertion Loss:				
54-500 MHz:	14 dB	13 dB	11.5 dB	7 dB
500-860 MHz:	15 dB	14 dB	12.5 dB	8 dB

Output Tilt 54-860 MHz: -2.0 dB

Output Flatness 54-860 MHz: +/- 0.5 dB

Isolation between any combination of Input Ports (1-4) or (5-8) or (9-12) or (13-16): 30 dB

Isolation between any combination of Input Ports (1-4) and (5-8) or (9-12) and (13-16): 45 dB

Input Return Loss: 14 dB

Output Return Loss: 14 dB

Combined Inputs Control Range: 15 dB

○ Ordering Information

Model	Stock No.	Description
HDA-12-860-18	6240 12	Headend Distribution Amplifier 860 MHz 12 Port Equalized Combiner w/ 18 dB Total Gain
HDA-16-860-16	6240 16	Headend Distribution Amplifier 860 MHz 16 Port Equalized Combiner w/ 16 dB Total Gain
HDA-8-860-20	6240 08	Headend Distribution Amplifier 860 MHz 8 Port Equalized Combiner w/ 20 dB Total Gain
HDA-4-860-24	6240 04	Headend Distribution Amplifier 860 MHz 4 Port Equalized Combiner w/ 24 dB Total Gain

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