BLONDER TONGUE LABORATORIES, INC.

HDA Series
HEADEND DISTRIBUTION AMPLIFIER

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. It integrates the abilities of a passive combiner and a distribution amplifier into a single high performance unit. The 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. Custom with built-in standby power supply with automatic switching capabilities.

Refer to product instruction manual for additional specification measurements and notes.

Features

- 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 and amplifier, or amplifier and splitter

Ordering Information

Model	Stock #	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 8	Headend Distribution Amplifier 860 MHz 8 Port Equalized Combiner w/ 20 dB Total Gain
HDA-4-860-24	6240 4	Headend Distribution Amplifier 860 MHz 4 Port Equalized Combiner w/ 24 dB Total Gain

Specifications

Input

Connectors:	"F" Female
Impedance:	75 Ω
Return Loss:	14 dB
Frequency Range:	47-860 MHz
Isolation:	30 dB (adj. input ports 1-4 or 5-8 or 9-12 or 13-16) 45 dB (alternate input ports 1-4 & 5-8 & 9-12 & 13-16)

Output (common to all models)

Connector:	"F" Female
Impedance:	75 Ω
Frequency:	47-860 MHz
Flatness:	+/- 1.0 dB
Gain Control:	15 dB
Slope Control:	10 dB
Output Return Loss	14 dB
Noise Figure:	7 dB
Channel Loading	78
Composite Triple Beat (CTB):	-68 dB
Cross Modulation (XMOD):	-68 dB
Composite 2nd Order (CSO):	-65 dB
Hum Modulation:	-65 dB
Model Dependent Specs	
Gain:	6240-16 = 17 dB; 6240-12 = 19 dB; 6240-8 = 22 dB; 6240-4 = 25 dB
Output Level:	6240-16: 40/46 dBmV 6240-12,-8, -4: 38/44 dBmV

General

Dimensions (W x D x H):	19" W x 1.75" H x 10.75" D (483 mm x 45 mm x 274 mm)
Power:	105-130 VAC 60 Hz
Power Dissipation:	23.5 W
Weight:	8 lbs (3.69 kg)
Operating Temperature:	32 to 122 °F (0 to 50 °C)
Storage Temperature:	-13 to 158 °F (-25 to 70 °C)
Operating Humidity:	0 to 95% RH @ 35 °C max, non-condensation
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensation

Alarms/Monitoring/Control

Monitoring / Indicators:	
Main Power Supply:	LED
Stand-by Power Supply:	LED
In/Out Test Point:	-30 dB
Controls	
Amplifier Gain:	Potentiometer
Amplifier Slope:	Potentiometer
Combiner Attenuator:	Potentiometer

Related Products

Model	Description
AQT	8VSB/QAM-to-QAM Transcoder; Eight modules in 3RU
AQM	ASI-to-QAM Modulator with sub-band input; Six modulators in 2RU