

HCDA SERIES

MODELS HCDA-1/RA/FRA/FRA-AG : HCDA-2 : HCDA-4



MODEL HCDA-1/RA/FRA/FRA-AG



MODEL HCDA-2



MODEL HCDA-4

FEATURES

- **Ideal for Off-Air & Digital Signal Pre-Amplification**
- **1 GHz Bandwidth**
- **Low Noise Figure: 3 dB**
- **Adjustable Gain in Both Directions (HCDA-1FRA-AG)**
- **High Return Loss (20 dB)**
- **Surge Protected (IEE C62.41-1991, All Ports)**
- **130 dB RFI Shielding**
- **LED Power Indicator**
- **Hermetically-Sealed Case & Ports**
- **Direct DC Powering or Cable Multiplexed (Optional inserter needed)**
- **Plug-In Power Supply Included**

HCDA-1/RA/FRA/FRA-AG, 2, 4 BI-DIRECTIONAL CABLE DROP AMPLIFIER

The HCDA Series is our top of the line CATV drop/subscriber amplifier. The HCDA amplifiers are unsurpassed in environmental ruggedness with sealed F-ports, powder-coated paint and a RFI hermetically-sealed back plate. This amplifier comes in one, two and four-output port models, with active or passive return.

The HCDA-1FRA is the same as the HCDA Series, with the addition of reverse amplification to overcome return path loss.

The HCDA-1RA provides amplification to the return path only, forward path is passive.

HCDA POWERING OPTIONS

The HCDA-PI power inserter allows amplifier powering through an existing output cable.



MODEL HCDA-PI

HCDA SERIES

SPECIFICATIONS

FORWARD PATH	HCDA-1	HCDA-2	HCDA-4	HCDA-1FRA	HCDA-1FRA-AG	HCDA-1RA
Frequency	54 - 1000 MHz	54 - 1000 MHz	54 - 1000 MHz	54 - 1000 MHz	54 - 1000 MHz	54 - 1000 MHz
Gain	15 dB	11 dB	7 dB	15 dB	15 dB to -5 dB (adjustable)	-1.5 dB
Maximum Input (157 Ch.)	7 dB	7 dB	7 dB	7 dB	7 dB	-
Maximum Output (79 Analog Ch. & 33 Digital Ch.)	25 dBmV	21.5 dBmV	18 dBmV	25 dBmV	25 dBmV	-
Slope	-	-	-	-	-	-
Flatness	±1 dB	±1 dB	±1 dB	±1 dB	±1 dB	± 1 dB
Group Delay	See Table Below	See Table Below	See Table Below	-	-	-
Noise Figure	3 dB	3 dB	3 dB	3 dB	3.5 dB	-
Input Return Loss	20 dB	20 dB	20 dB	20 dB	20 dB	18 dB
Output Return Loss	20 dB	20 dB	20 dB	20 dB	20 dB	18 dB
Cross Modulation (XMOD)	-75 dB	-75 dB	-75 dB	-75 dB	-75 dB	-
Composite Second Order (CSO)	-62 dB	-62 dB	-62 dB	-62 dB	-62 dB	-
Composite Triple Beat (CTB)	-75 dB	-75 dB	-75 dB	-75 dB	-75 dB	-
RETURN PATH						
Frequency	5 - 42 MHz	5 - 42 MHz	5 - 42 MHz	5 - 42 MHz	5 - 42 MHz	5 - 42 MHz
Gain	Passive (-1 dB)	Passive (-4.5 dB)	Passive (-8 dB)	10 dB	-8 dB to 10 dB (adjustable)	10 dB
Flatness	± .5 dB	± .5 dB	± .5 dB	±1 dB	±1 dB	± 1 dB
Group Delay	See Table Below	See Table Below	See Table Below	-	-	-
Maximum Input (1 Ch.)	-	-	-	45 dBmV	45 dBmV	45 dBmV
Maximum Output (1 Ch.)	-	-	-	55 dBmV	55 dBmV	55 dBmV
GENERAL						
Power Requirements	12VDC, 2.4W	12VDC, 2.4W	12VDC, 2.4W	12VDC, 3.6W	12VDC, 3.6W	12VDC, 1.2W
Operating Temperature	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Dimensions	2.5" x 4.5"	2.5" x 4.5"	2.5" x 4.5"	2.5" x 4.5"	2.5" x 4.5"	2.5" x 4.5"
Weight	1 lb. (w/power supply)	1 lb. (w/power supply)	1 lb. (w/power supply)	1 lb. (w/power supply)	1 lb. (w/power supply)	1 lb. (w/power supply)

GROUP DELAY : FORWARD PATH (HCDA 1, 2 & 4 : 54 - 1000 MHz)

20 ns Max.	For Ch. 2, 3.58 MHz Span
10 ns Max.	For Ch. 3, 3.58 MHz Span
5 ns Max.	For All Other Channels, 3.58 MHz Span

GROUP DELAY : RETURN PATH (HCDA 1, 2 & 4 : 5 - 42 MHz)

20 ns Max.	5 - 42 MHz, 2 MHz Span
5 ns Max.	10 - 36 MHz, 1 MHz Span

NOTE: All specifications typical unless otherwise noted