

# HCDA SERIES

■ MODELS HCDA-1/FRA/RA, 2, 4



MODEL HCDA-2



MODEL HCDA-4



MODEL HCDA-1/FRA/RA

## ■ FEATURES

- 1 GHz Bandwidth
- Hermetically Sealed Case & Ports
- Low Noise Figure: 3 dB
- High Return Input Capability
- Direct or Line Powering Capability
- High Return Loss
- Surge Protected (IEE C62.41-1991, All Ports)
- 130 dB RFI Shielding
- LED Power Indicator

## ▼ CUSTOMER NOTES:

### HCDA-1/FRA/RA, 2, 4 BIDIRECTIONAL CABLE DROP AMPLIFIER

The **HCDA Series** is the top of the line CATV drop/subscriber amplifier. The **HCDA** amplifiers are unsurpassed in environmental ruggedness with sealed “F” ports, powder coated paint, and an 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 quality drop amplifier as the rest of 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 passive.

### HCDA POWERING OPTIONS



MODEL HCDA-PI

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

# HCDA SERIES

## SPECIFICATIONS

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

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