

Broadband CATV Distribution Amplifiers

ACA 30 Series



ACA-30-550

○ Features & Benefits

- Models Available in 550, 750 and 860 MHz Bandwidths
- Built-in Variable Gain and Slope Controls
- Push-Pull Hybrid Module Design
- Aluminum Chassis Provides Excellent Heat Dissipation
- 5-30 MHz Passive Return Models

ACA-30-xxR

The ACA Series are indoor broadband distribution amplifiers designed to be used in RF distribution systems such as those for apartment complexes, hospitals, schools, prisons, and hotels. Two way models are available in 550, 750 and 860 MHz bandwidths with a passive return path of 5-30 MHz. A one way model is also available in a 550 MHz bandwidth only.

ACA's are housed in a compact, aluminum chassis that provides excellent heat dissipation. An external power transformer is provided for use with 117 VAC power. The unit can also be powered directly with 24 VAC.

○ Specifications

RF	ACA 30-550	ACA 30-55R	ACA 30-75R	ACA 30-86R
Frequency Range (MHz):	47-550	5-30 47-550	5-30 47-750	5-30 47-860
Channel Loading:	77	77	110	129
Flatness (dB):	±1.00	±1.00	±1.00	±1.00
Gain (Reverse) (dB):	32, (-)	31, (-.75)	31, (-.75)	31, (-.75)
Noise Figure (dB) (a):	7.0	8.5	9.0	9.0
Output Level (dBmV) (d):	+36/+44	+36/+44	+34/+44	+34/+44
Gain Control Range (dB):	20	15	15	15
Slope Control Range (dB):	10	10	10	10
Composite Triple Beat - CTB (dB) (b):	-64	-64	-63	-56
Cross Modulation - XMOD (dB) (b):	-64	-64	-62	-58
Composite Second Order - CTB (dB) (b):	-64	-58	-64	-58
Hum Modulation (dB):	-65	-65	-65	-65
Return Loss				
Input (dB):	14	12	12	12
Output (dB):	14	12	12	12
General				
Power Requirements				
Voltage (VAC) (c):	117, ±10%	117, ±10%	117, ±10%	117, ±10%
Frequency (Hz):	24	24	24	24
Power (W):	60	60	60	60
Power (W):		19	19	19
Temperature Range (°C):	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Mechanical				
Dimensions (LxWxD):				
(in)	8.00 x 5.50 x 2.50	7.50 x 5.63 x 2.00	7.50 x 5.63 x 2.00	7.50 x 5.63 x 2.00
(mm)	203 x 146 x 64	191 x 143 x 51	191 x 143 x 51	191 x 143 x 51
Weight:				
(lbs)	4.1	3.1	3.1	3.1
(kg)	1.86	1.36	1.36	1.36

Notes

- (a) Measured at full gain with 0 dB slope.
 (b) At rated output capability and channel loading.
 (c) The ACA-30 Series can be powered via 117VAC using the included transformer or via 24 VAC without the transformer

○ Ordering Information

Model	Stock No.	Description
ACA-30-550	5450	Apartment Complex Amplifier 30dB, 47-550MHz
ACA-30-55R	5750	Apartment Complex Amplifier 30dB, 47-550MHz, Passive Return, Single Hybrid
ACA-30-86R	5780	Apartment Complex Amplifier 30dB, 47-860MHz, Passive Return, Dual Hybrid
ACA-30-75R	5770	Apartment Complex Amplifier 30dB, 47-750MHz, Passive Return, Dual Hybrid

Broadband CATV Distribution Amplifier

ACA 35-1000



○ Features & Benefits

- One-Way Operation 40 to 1000 MHz
- Discrete Push-Pull Amplifier Stages
- Built-in Variable Gain Control
- Surface Mount Technology

The ACA-35-1000 is an economical 1 GHz indoor broadband distribution amplifier, designed for RF distribution systems, such as apartment complexes, hospitals, schools, prisons, and hotels. The ACA-35-1000 amplifier has 35 dB of operational gain and has a gain control range of 16 dB. These amplifiers employ push-pull discrete amplifier stages with surface mount technology. The ACA -35-1000 is housed in a compact, aluminum chassis that provides excellent heat dissipation. The amplifier is powered via an internal 117 VAC power supply

○ Specifications

RF

Frequency Range: 40-1000 MHz
Channel Loading: 70
Flatness: ± 1.00 dB
Gain: 35 dB
Noise Figure (a): 11 dB
Output Level: +30/+40 dBmV
Input Test Port Level: -20, ± 2 dB
Output Test Port Level: -20, ± 2 dB
Gain Control Range: 18 dB
Composite Triple Beat - CTB (b): -66 dB
Cross Modulation - XMOD (b): -65 dB
Second Order (b): -66 dB
Hum Modulation: -65 dB
Number Of Hybrids: discrete
Hybrid Technology: Push-Pull
Impedance - All Ports: 75 Ohm
Return Loss
Input: 12 dB
Output: 10 dB

Controls (Top Panel)

Gain: Control

Indicators

Power ON: Red LED

General

Power Requirements
Voltage (c): 117, $\pm 10\%$ VAC
16 VAC
Frequency: 60 Hz
Power: 15 W
Temperature Range: 0 to +50 °C

Mechanical

Dimensions (LxWxD):
7.25 x 6.00 x 1.75 in.
184 x 152 x 44 mm
Weight: 3.63 lbs (1.65 kg)

Connectors (Top Panel)

Power DIN, 5 Pin
RF Input: Type "F", female
RF Output: Type "F", female
Output Test Port: Type "F", female

Notes

- (a) Measured at full gain with 0 dB slope.
(b) At rated output capability and channel loading.

○ Ordering Information

Model	Stock No.	Description
ACA-35-1000	5470	Apartment Complex Amplifier 35dB, 40-1000MHz, Push-Pull Discrete