

ZCM-48-550

High-Gain Broadband CATV Distribution Amplifiers



○ Features & Benefits

- 550 MHz High Gain Distribution Amplifier
- Configurable with or without Preamp Section by External Coax Jumper
- Built-In Variable Gain and Slope Controls
- External UL Listed Power Transformer

The ZCM-48-550 is an affordable high gain indoor broadband distribution amplifier. The ideal application for this amplifier is for use in a distribution system where the input source is a "cable drop" or the output of a MATV/SMATV headend. The ZCM-48-550 provides frequency coverage of 54 to 550 MHz and has a flat 50 dB of operational gain. The amplifier also has built-in variable gain and slope controls. This amplifier uses a single push-pull hybrid module and discrete driver stages, capable of delivering high output levels with low distortion, even in systems with 77 channels of programming. A separate preamp (18 dB gain) and postamp (32 dB gain) are included with an external RF loop used to provide overall output capability.

The ZCM-48 Series products are housed in compact, aluminum chassis that provides excellent heat dissipation. The ZCM-48 Series products are provided with an external UL@ listed power transformer for use with 117 VAC power.

○ Specifications

RF

Frequency Range: 54-550 MHz
Channel Loading: 77
Flatness: ± 1.00 dB
Overall Gain: 50 dB
Noise Figure (a): 5.5 dB
Output Level: +36/+44 dBmV
Gain Control Range: 10 dB
Slope Control Range: 10 dB
Composite Triple Beat - CTB(b): -66 dB
Cross Modulation - XMOD (b): -64 dB
Composite Second Order - CSO (b): -66 dB
Hum Modulation: -65 dB
Number Of Hybrids: 1
Hybrid Technology: Push-Pull
Impedance - All Ports: 75 Ω
Return Loss
Input: 14 dB
Output: 16 dB

General

Power Requirements
Voltage: 117, $\pm 10\%$ VAC
Frequency: 60 Hz
Power: 19 W
Temperature Range: -10 to +50 $^{\circ}\text{C}$

Mechanical

Dimensions (LxWxD):
7.50 x 5.63 x 2.00 in
191 x 143 x 51mm

Weight:
3.1 lbs
1.36 kg

Controls (Top Panel)

Gain: Control
Slope: Control

Connectors (Top Panel)

RF Input: Type "F", female
RF Output: Type "F", female

Notes

- (a) Measured at full gain with 8dB slope.
(b) At rated output capability and channel loading.

○ Ordering Information

Model	Description
ZCM-48-550	Broadband CATV Distribution Amplifier 50dB, 54-550MHz