#### DISTRIBUTION Active Components







1GHz Broadband Push-Pull Distribution Amplifier



- Broadband 54-1000MHz frequency range (Channels CATV 2-158)
- 30dB gain for optimal carrierto-noise ratio and superior picture quality
- ± 0.5dB flatness across band provides low distortion and excellent frequency response
- Employs state-of-the art hybrid push-pull technology for distortion-free audio-video quality
- Adjustable slope and gain controls for easy system balancing
- Easy-access controls and lowloss (-20dB) test point enable simplified setup and performance monitoring
- Shielded enclosure provides over 95dB RFI shielding performance reducing leakage and ingress
- Built-in lightning and line voltage surge protection protects the unit from damage
- Black anodized extruded aluminum heat-sink maximizes heat dissipation for improved reliability and corrosion resistance
- Also available in a rack mount version as CA30RK-1000 **Headend Amplifier**



# CA30/1000

1GHz Broadband Push-Pull Distribution Amplifier

The Pico Macom CA30/1000 is a high quality push-pull wall-mounted distribution amplifier producing signals with extremely low-noise and harmonic distortion. The amplifier is capable of broadband 158-channel operation over the 54-1000MHz range. This amplifier makes an excellent distribution system amplifier for heavily loaded MDU and broadband CATV and SMATV systems. Because of its extremely low-noise figure and low distortion, the CA30/1000 is ideally suited for use in larger networks where amplifier cascading is required. In expanding bi-directional broadband systems the CA30/1000 can be used in conjunction with Tru-Spec Sub CATV diplexers to split forward and reverse paths. Alternately Pico Macom's PIDA series bi-directional amplifiers may be used.

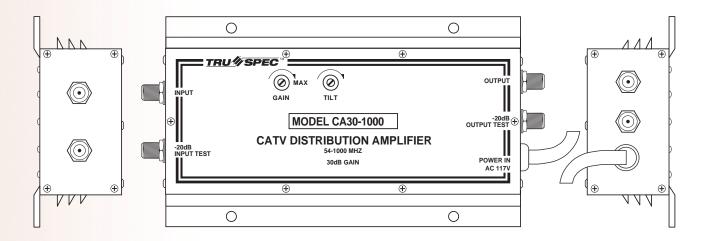
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### **Product Specifications**



# CA30/1000

1GHz Broadband Push-Pull Distribution Amplifier



## **Specifications**

Bandwidth:
Gain:
Gain Adjust Range:
Slope Adjust Range:
Flatness:
Max. Output:*
-

Noise Figure: Second Order Beats:

**Composite Triple Beat:** 

54-1000 MHz 30 dB 12 dB 9 dB ± 0.5 dB (54-1000 MHz) 45 dB (54 channels -57 dB cross modulation) 7.5 dB -60 dB (129 channels @ 13 dBmV input level) -58 dB (129 channels @ 13 dBmV input level)

#### Cross Modulation:

Return Loss In: Return Loss Out: Test Points: Power Requirements: Operating Temperature: Dimensions: Weight: -62 dB (129 channels @ 13 dBmV input level) >20 dB to 800 MHz >12 dB to 800-1000 MHz -20 dB 115 VAC, 60 Hz, 4 W -10° to +50° C 8″(L) x 2<sup>3</sup>/4″(D) x 4<sup>1</sup>/2″(H) 2.5 lbs.

## **Channel Loading Specifications**

Total # of Channels	Max. Input Level	Max. Output Level @ Max Slope	
7	44 dBmV	66 dBmV	
12	41 dBmV	63 dBmV	
36	32 dBmV	54 dBmV	
54	23 dBmV	45 dBmV	
78	18 dBmV	40 dBmV	
108	14 dBmV	36 dBmV	
125	11 dBmV	32 dBmV	
158	8 dBmV	30 dBmV	

### **Ordering Information**

#### CA-30/1000

Specifications Subject to Change

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