



CA30RK1000

1GHz Broadband Push-Pull Headend Amplifier



- ▶ **Broadband 54-1000MHz frequency range (Channels CATV 2-135)**
- ▶ **30dB gain for optimal carrier-to-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**
- ▶ **Front panel controls and test point enable easy setup and monitoring**
- ▶ **Double 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**
- ▶ **Also available in a wall mount version as CA30-1000 Distribution Amplifier**

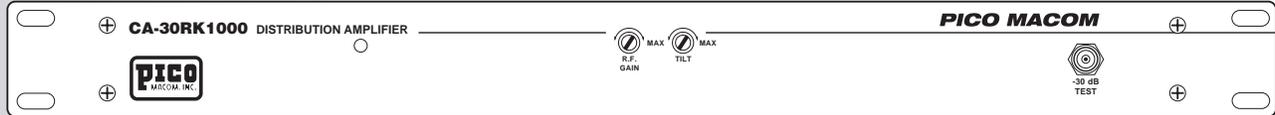
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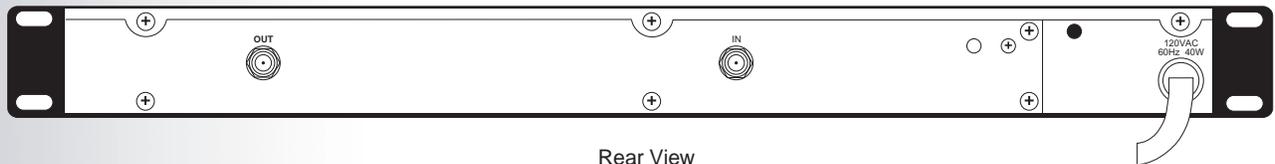
The **Pico Macom CA30RK1000** is a professional re-broadcast grade push-pull amplifier producing signals with extremely low noise and harmonic distortion. The amplifier is capable of 135 channel operation over the 54-1000MHz range. This rack-mounted amplifier makes an excellent headend launch amplifier and is frequently used in conjunction with **Pico Macom's** passive headend combiners (**PHC12G** or **PHC24G**) to overcome losses associated with signal combining in broadband CATV systems. Also, the **CA30RK1000** is ideally suited for amplifying the cable input prior to **Pico Macom's** CEF channel elimination filter in applications requiring "mix-and-match" channel applications or those requiring local insertion. **Pico Macom** backs up this product with its industry leading 5-year limited warranty.

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Front View



Rear View

RF

Bandwidth:	54-1000 MHz
Gain:	30 dB
Gain Adjust Range:	12 dB
Slope:	9 dB
Flatness:	± 1.5 dB (54-1000 MHz)
Max. Output (@ Max. Slope)	45 dB (54 channels, -57 dB cross modulation)
Noise Figure:	7.5 dB
Second Order Beats:	-60 dB (129 channels @ 13 dBmV input level)
Composite Triple Beat:	-58 dB (129 channels @ 13 dBmV input level)
Cross Modulation:	-62 dB (129 channels @ 13 dBmV input level)
Return Loss In:	>20 dB to 800 MHz
Return Loss Out:	>12 dB to 800-1000 MHz

General

Power Input:	115 VAC, 60 Hz, 4 W
Operating Temperature:	-10° to +50° C
Dimensions:	19" (L) x 3" (D) x 1 ³ / ₄ " (H)
Weight:	3.8 lbs.
Test Points:	-20 dB

Ordering Information

CA-30RK1000

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