

# Features and Benefits

**ANTRONIX®**

## MMRA4-8EQ MoCA Residential Amplifier

With MoCA (Multimedia over Coax Alliance) having widespread deployment for high speed in-home networking, this amplifier has enhanced performance in the MoCA band to optimize the data rates for video sharing, multi-room DVR service, video conferencing and other MoCA applications. This amplifier utilizes the Antronix patented CamPort®. This auto-seizing F-port ensures maximum contact area and reliability for multimedia applications. The integrated MoCA point of entry filter prevents MoCA signals from interfering with an adjacent subscriber.

- **MoCA Enhanced**  
Optimized RF performance in the MoCA band ensures maximum data rates for MoCA enabled devices. Integrated MoCA point of entry filter prevents MoCA signals from interfering with adjacent subscribers.
- **CamPort® Auto-Seizing F-Port**  
Patented auto-seizing brass F-port features a “Cam Activated Mechanism” to provide full contact pressure (> 2000 grams) on the center conductor for maximum reliability.
- **Internal Cable Equalizer**  
An internal cable equalizer provides 4.5dB of tilt compensation associated with standard cable loss.
- **6 kV Combination Wave Surge Protection**  
Unique 6kV surge protection on all RF ports without the use of arc gaps which may cause high impulse noise during discharge.
- **Powder Coated Aluminum Housing**  
Provides the most corrosion resistant protection against salt fog and rust.
- **Optional Power Inserter for Remote Powering**  
The amplifier can be powered remotely with a dual isolation compartment power inserter for high AC to RF isolation to prevent ingress.
- **PTC Short-Circuit Protected UL Listed Adaptor**  
Self-resetting circuit provides safe protection against short-circuits to minimize maintenance costs.



## Electrical Specifications MMRA4-8EQ

Forward Specifications	Frequency (MHz)	Specifications
<b>Gain (Outputs 1–4)</b> (dB nom)	54-1002	
	54	+3.0
	1002	+7.5
<b>Forward Equalization Tilt</b> (dB nom)	54-1002	4.5
<b>Return Loss</b> (dB min)	54-1002	18
<b>Port to Port Isolation</b> (dB min)	54-1002	25
<b>Noise Figure</b> (dB max)	54-1002	4.0
<b>Group Delay</b> (ns/3.58 MHz)	Ch. 2	30.0
	Ch. 3	10.0
	CH. 4 & up	5.0
<b>Distortions<sup>1</sup></b>		
Composite Triple Beat (dBc)		-74
Composite Second Order (dBc)		-62
Cross Modulation (dBc)		-74
Hum Modulation (dBc)		-80
Return Specifications	Frequency (MHz)	Specifications
<b>Insertion Loss (Outputs 1–4)</b> (dB max)	5-42	-8.5
<b>Input Return Loss</b> (dB min)	5-15, 40-42	18
	15-40	20
<b>Output Return Loss</b> (dB min)	5-15, 40-42	18
	15-40	25
<b>Port to Port Isolation</b> (dB min)	5-15, 40-42	25
	15-42	28
<b>Group Delay</b> (ns/1.5 MHz)	5.0-6.5	20.0
	6.5-40	10.0
	(ns/2.0 MHz)	40-42
MoCA Specifications	Frequency (MHz)	Specifications
<b>Insertion Loss</b>		
Output Port to Output Port (dB max)	1125-1525	30
<b>Isolation</b>		
Output Port to Input Port (dB min)	1125-1525	36
Input Port to Output Port (dB min)	1125-1225	23
	1225-1525	26

**Notes:**

- +12dBmV flat input, 79 analog channels from 55 MHz to 550 MHz. Digital channels from 550 MHz to 1002 MHz at 6 dB below the analog channels.

## MMRA4-8EQ MoCA Residential Amplifier

General	
Nominal Impedance	75 Ω
F-Connector Type	ANSI/SCTE 01 Brass Compliant Sealed CamPort®
Power Adaptor	12 VDC/200 mA Output, UL, PTC Short-Circuit Protected
Dimensions/Weight	4.9" W x 4.1" H x 1.0" D / 0.62 lb.
Environmental	
Pressure Seal	15 psi
Surge Withstand	6 kV/3 kA Combo Wave (IEEE C62.41-1991 Cat. B3) on all Ports 6 kV/200 A Ring Wave (IEEE C62.41-1991 Cat. A3) on all Ports
RFI Screening Effectiveness	-100 dB
Operating Temperature	-40 °C to +60 °C
Corrosion Resistance	Meets ANSI/SCTE Specification

### Ordering Guide

<b>MMRA4-8EQ/AC</b>	4 Output Amplifier. AC Power Adaptor Included
<b>ARPI-2000</b>	Optional Power Inserter for Remote Powering
<b>ARAC-12N</b>	AC Power Adaptor, 120 VAC/60 Hz Input, 12 VDC Output, 200 mA

