

Features and Benefits

ANTRONIX®

MMRA1-15EQ MoCA Equalized 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 compact amplifier has an all-ports-down configuration which allows for ease of installation in a NID enclosure. 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.
- **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 4.5 dB of tilt compensation associated with standard cable loss.
- **All-Ports-Down Configuration for NID Enclosures**
The all ports facing down configuration provides clean wiring within a NID enclosure.
- **6 kV Combination Wave Surge Protection**
Unique 6 kV 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 MMRA1-15EQ

Forward Specifications	Frequency (MHz)	Specifications
Gain (dB nom)	54-1002	
	54	+10.5
	1002	+15.0
Forward Equalization Tilt (dB min)	54-1002	4.5
Return Loss (dB min)	54-1002	18
Noise Figure (dB max)	54-1002	4
Group Delay (ns/3.58 MHz)	Ch. 2	30
	Ch. 3	10
	CH. 4 & up	5
Distortions¹		
Composite Triple Beat (dBc)		-75
Composite Second Order (dBc)		-62
Cross Modulation (dBc)		-74
Hum Modulation (dBc)		-80
Return Specifications	Frequency (MHz)	Specifications
Insertion Loss (dB max)	5-42	0±1.5
Return Loss (dB min)	5-15	18
	40-42	
	15-40	25
Group Delay (ns/1.5 MHz)	5.0-6.5	20
	6.5-40	10
(ns/2.0 MHz)	40-42	30
MoCA Specifications	Frequency (MHz)	Specifications
Insertion Loss		
Output Port to Input Port (dB min)	1125-1525	36
Input Port to Output Port (dB min)	1125-1525	16

Notes:

- +12 dBmV 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.

Specifications MMRA1-15EQ

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	3.4" W x 2.6" H x 0.8" D/0.26 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

MMRA1-15EQ/AC	1 Output Amplifier. AC Power Adaptor Included
ARPI-2000	Optional Power Inserter for Remote Powering
ARAC-12N	AC Power Adaptor, 120 VAC/60 Hz Input, 12 VDC Output, 200 mA

