

MRA1-15/AC

MicroAmp



(actual size)

Overview

The latest Antronix MicroAmp provides subscriber premise amplification in a small convenient package. The new micro-housing allows all ports of the amplifier to be facing down to simplify coaxial cable wiring in NID enclosures or small spaces. Our patented CamPort[®] provides the only auto-seizing F-port for maximum contact area and reliability for multimedia applications. Ideal for both indoor and outdoor applications, the ARA was engineered to withstand the harshest environmental threats with the capability of enduring repeated high power surges on any port.

Ordering Guide

MRA1-15/AC	1 output amplifier with 120VAC/60Hz Power Adaptor
ARPI-2000	Power Inserter for Remote Powering
ARAC-12N	Power Adaptor, 120VAC/60Hz input, 12VDC output

Features / Benefits

- Micro-housing**
Our micro-housing offers the convenience of a small package without sacrificing performance.
- All Ports Down**
With all ports on one side, wiring within an enclosure is simplified. The unit can also be mounted in a vertical configuration on a flat horizontal surface with all ports facing up.
- CamPort[®] Auto-Seizing F-Port**
Patented auto-seizing F-port features a "Cam Activated Mechanism" to provide full contact pressure (>2,000 grams) on the center conductor for maximum reliability.
- 3 dB Noise Figure**
Provides clean amplification of weak signals to overcome the poor noise figure in TV tuners and converters.
- 6 kV Combination Wave Surge Protection**
Unique surge protection on all ports without the use of arc gaps which may cause high impulse noise during discharge.
- Gallium Arsenide Technology for Low Distortion**
Provides improved distortion and noise performance.
- 15 psi Sealed SCTE Compliant CamPort[®]**
Sealed brass CamPort[®] prevents water migration.
- 5-42 / 52-1000 MHz Duplex Filter**
True 5-42 MHz return band and full 1 GHz downstream spectrum for more useable bandwidth.
- Nickel Plated Housing**
Provides the excellent corrosion resistant protection against salt fog and rust.
- Powered Locally or Remotely**
Power the amplifier locally with supplied adaptor or remotely with an optional power inserter.
- PTC Short-Circuit Protected UL Listed Adaptor**
Self-resetting circuit protection provides safe protection against short-circuits to minimize maintenance costs.
- Dual Compartment Power Inserter**
Provides high AC to RF isolation to minimize ingress.
- Exceeds all SCTE Standards**
- 5 Year Warranty**
Applies to amplifier only.

Electrical Specifications

		MRA1-15	
Forward Specification	Freq. (MHz)	1 output	
Gain (dB nominal)	52 – 1000	14.5	
Return Loss (dB)	52 – 1000	> 18	
Slope (dB)	52 – 1000	< 0.5	
Noise Figure (dB)	52 – 1000	< 3.0	
Flatness (dB)	52 – 1000	± 0.5	
AC/RF Isolation (dB)	52 – 1000	> 65	
Group Delay (nS/3.58 MHz)	Ch. 2	< 16.0	
	Ch. 3	< 8.0	
	Ch. 4	< 5.0	
	Ch. 5 & up	< 3.0	
Distortions ¹			
Composite Triple Beat (dBc)		-75	
Composite Second Order (dBc)		-62	
Cross Modulation (dBc)		-75	
Hum Modulation (dBc)		-80	

		MRA1-15	
Return Specification	Freq. (MHz)	1 output	
Insertion Loss (dB)	5 – 40	< 1.5	
	40 – 42	< 1.8	
Flatness (dB)	5 – 42	± 0.5	
Return Loss (dB)	5 – 42	> 18	
Group Delay (nS/1.5 MHz)	5.0 – 6.5	< 20	
	6.5 – 8.0	< 15	
	8.0 – 34	< 5	
	34 – 42	< 20	

General Specifications	All Models
Amplifier Type	Gallium Arsenide Technology
Nominal Impedance	75 Ω
RFI	> 120 dB
F-Connector Type	ANSI/SCTE 01 (formerly IPS-SP-400) Compliant Brass Sealed CamPort [®]
Pressure Seal	15 psi
Surge Withstand	6kV Combination Wave: IEEE C62.41-1991 Cat. B3 on all ports
Operating Temperature	-40°C to +60°C
Warranty	5 years
Power Adaptor	12 VDC / 200 mA output UL Listed, PTC Short-Circuit Protected, Self-Resetting Adaptor
Dimensions	3.5" W x 2.3" H x 0.8" D
Weight	0.4 lb.

¹ +10 dBmV flat input, 79 analog channels from 55 MHz to 550 MHz. Digital channels from 550 MHz to 750 MHz at 6 dB down.

Specifications subject to change without notice