

Features and Benefits

ANTRONIX®

MicroAmp MRA series

The latest Antronix MicroAmp provides subscriber premise amplification in a small convenient package. The one output 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 MRA was engineered to withstand the harshest environmental threats with the capability of enduring repeated high power surges.

- **Micro-Housing**
Our micro-housing offers the convenience of a small package without sacrificing performance.
- **Port Configuration Ideal for NID Enclosures**
The micro-housing allows all output ports of the amplifier to be facing down to simplify coaxial cable wiring in NID enclosures or small spaces.
- **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 Diplex 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 MRA series

		MRA1-15	MRA2-11	MRA4-8
Forward Specification	Freq (MHz)	1 output	2 output	4 output
Gain (dB nominal)	52-1002	14.5	11.5	7.5
Return Loss (dB)	52-1002	>20	>20	>20
Port-to-Port Isolation (dB)	52-1002	NA	>23	>25
Noise Figure (dB)	52-1002	<3.0	<3.0	<3.0
Flatness (dB)	52-1002	±0.5	±0.5	±0.5
AC/RF Isolation (dB)	52-1002	>65	>65	>65
Group Delay (nS/3.58 MHz)	Ch. 2	<16.0	<16.0	<16.0
	Ch. 3	<8.0	<8.0	<8.0
	Ch. 4	<5.0	<5.0	<5.0
	Ch. 5 & up	<3.0	<3.0	<3.0
Distortions¹				
Composite Triple Beat (dBc)		-75	-75	-75
Composite Second Order (dBc)		-62	-62	-62
Cross Modulation (dBc)		-75	-75	-75
Hum Modulation (dBc)		-80	-80	-80
Return Specification				
Insertion Loss (dB)	5-42	<1.2	<4.8	<8.3
Flatness (dB)	5-42	±0.5	±0.5	±0.5
Return Loss (dB)	5-42	>20	>20	>20
Port-to-Port Isolation (dB)	5-42	NA	>25	>25
Group Delay (nS/1.0 MHz)	5.0-7.0	<20	<20	<20
	7.0-8.0	<15	<15	<15
	8.0-36	<5	<5	<5
	36-42	<20	<20	<20



Specifications MRA series

General	
Amplifier Type	Gallium Arsenide Technology
Nominal Impedance	75Ω
RFI	>120 dB
F-Connector Type	ANSI/SCTE 01 (formerly IPS-SP-400) Compliant Brass Sealed CamPort®
Pressure Seal	15 psi
Surge Withstand	6 kV Combination Wave: IEEE C62.41-1991 Cat. B3 on all RF Ports, and including the Power Adaptor
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/Weight (weight is without power supply)	One Output: 3.5" W x 2.3" H x 0.8" D / 0.4 lb. Two Output: 3.5" W x 2.9" H x 0.8" D / 0.4 lb. Four Output: 4.6" W x 2.9" H x 0.8" D / 0.6 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.

Ordering Guide

MRA1-15/AC*	1 Output Amplifier, 120 VAC PS
MRA2-11/AC*	2 Output Amplifier, 120 VAC PS
MRA4-8/AC*	4 Output Amplifier, 120 VAC PS
ARPI-2000	Power Inserter for Remote Powering
ARAC-12N	Power Adaptor, 120 VAC/60Hz Input, 12 VDC Output

