Features and Benefits

ANTRONIX®

VRA904B

VoIP Integrated Residential Amplifier 8+1P

The Antronix VoIP Residential Amplifier provides a passive VoIP port for reliable voice service, even when power is disrupted to the amplifier. The 9 output port amplifier has 8 amplified output ports with unity gain in the forward band and an active return band with one passive VoIP port. This amplifier utilizes the Antronix patented CamPort®. This auto-seizing F-port ensures maximum contact area and reliability for multimedia applications. The all-ports-down configuration allows for ease of installation in a NID enclosure.

- **Passive VoIP Port for Critical Voice Service**
  The passive VoIP port provides a passive 4.5 dB loss, even when power is disrupted to maintain critical voice service.
- **Self-Terminating Internal Switch**
  An internal self-terminating switch provides excellent bi-directional RF performance between the input port and VoIP port even when power is disrupted.
- **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.
- **All-Ports-Down Configuration for NID Enclosures**
  The all ports facing down configuration provides clean wiring within a NID enclosure.
- **6 kV Surge Protection**
  Unique surge protection on all RF ports without the use of arc gaps which may cause high impulse noise during discharge.
- **Low Intermodulation Ferrites**
  Proprietary ferrite blend inhibits re-magnetization of the core due to voltage spikes from impulse noise or lightning. This prevents high-level return carriers from affecting forward path video signals.
- **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 protection provides safe protection against short-circuits to minimize maintenance costs.

440 Forsgate Drive, Cranbury, NJ 08512 • T: 609.860.0160 • F: 609.860.1687 • antronix.com

Electrical Specifications

VoIP Integrated Residential Amplifier

VRA904B

8+1P

Forward Specifications	Frequency (MHz)	Specifications
Gain (Outputs 1–8) (dB nom)	52-1002	0
Return Loss (dB min)	52-1002	18
Port to Port Isolation (dB min)	52-1002	22
Noise Figure (dB max)	52-1002	8.0
RFI Isolation	5-1002	-120
Group Delay (ns/3.58 MHz)	Ch. 2	30
	Ch. 3	10
	CH. 4	5
	CH. 5 & up	3
Distortions[1]		
Composite Triple Beat (dBc)		-75
Composite Second Order (dBc)		-62
Cross Modulation (dBc)		-75
Hum Modulation (dBc)		-80
Return Specifications	**Frequency** (MHz)	**Specifications**
Gain (Outputs 1–8) (dB nom)	5-42	-4.0
Return Loss (dB min)	5-42	18
Port to Port Isolation (dB min)	5-42	25
Noise Figure (dB max)	5-42	18
Group Delay (ns/1.0 MHz)	5.0-6.5	20
	6.5-8.0	15
	8.0-34	5
	34-42	20
VoIP Port Specifications	**Frequency** (MHz)	**Specifications**
Insertion Loss (dB nom)	5-1002	4.5 ±1.0
Return Loss (dB min)	5-1002	18

Notes:

1. +12 dBmV flat input, 79 analog channels from 55 MHz to 550 MHz. Digital channels from 555 MHz to 1002 MHz at 6 dB below the analog channels.

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Specifications
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General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE 01 Brass Compliant Sealed CamPort®
Power Adaptor	12 VDC/500 mA Output, UL, PTC Short-Circuit Protected
Dimensions/Weight	6.0" W x 3.8" H x 1.4" D/0.74 lb.
Environmental	
Pressure Seal	15 psi
Surge Withstand	6 kV Combo Wave (IEEE C62.41-1991 Cat. B3) on Input Port 6 kV Ring Wave (IEEE C62.41-1991 Cat. A3) on Output Ports and VoIP Port
Operating Temperature	-40 °C to +60 °C
Corrosion Resistance	Meets ANSI/SCTE Specification

Ordering Guide

VRA904B/AC	8 Amplified Unity Gain Outputs + 1 VoIP Port. AC Power Adaptor Included
ARPI-2000	Power Inserter for Remote Powering
ARAC-15N-50E6	AC Power Adaptor, 120 VAC/60 Hz Input, 15 VDC Output, 500 mA, Efficiency Level VI

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