

Features and Benefits

ANTRONIX®

VRA900 VoIP Residential Amplifier

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 and return band plus one passive VoIP output 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 and is powered with a power inserter (included).



- **Passive VoIP Port**

The passive VoIP port provides a passive 3.5dB loss, even when power is disrupted to maintain critical voice service.

- **Unity Gain Forward and Return**

Active gain in the forward and return band provides unity gain in both directions for ease of installation.

- **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.

- **3 dB Noise Figure**

Provides clean amplification of weak signals to overcome the poor noise figure in TV tuners and converters.

- **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.

- **Zinc Diecast Housing with Soldered Back Plate**

Provides corrosion resistance for both indoor and outdoor applications and repeatable 120 dB RFI shielding.

- **Power Inserter Included for Remote Powering**

The amplifier is powered remotely with a dual isolation compartment power inserter for high AC to RF isolation to prevent ingress. Two remote powering ports are available for flexibility.

- **PTC Short-Circuit Protected UL Listed Adaptor**

Self-resetting circuit protection provides safe protection against short-circuits to minimize maintenance costs.

Electrical Specifications VoIP Residential Amplifier VRA900

Forward Specifications	Frequency (MHz)	Specifications
Gain (Outputs 1 – 8) (dB nom)	52-1002	0 ±1.0
Return Loss (dB)	52-1002	18
Port to Port Isolation (dB)	52-1002	22
Noise Figure (dB)	52-1002	3.0
RFI Isolation (dB)	5-1002	-120
Group Delay (ns/3.58 MHz)	Ch. 2	30.0
	Ch. 3	10.0
	CH. 4	5.0
	CH. 5 & up	3.0
Distortions²		
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	0 ±1.0
Return Loss (dB)	5-42	18
Port to Port Isolation (dB)	5-42	25
Noise Figure (dB)	5-42	6.0 ¹
Group Delay (ns/1.0 MHz)	5.0-6.5	20.0
	6.5-8.0	15.0
	8.0-34	5.0
	34-42	20.0
VoIP Port Specifications	Frequency (MHz)	Specifications
Insertion Loss (dB nom)	5-1002	4.0 ±1.0
Return Loss (dB)	5-1002	18

Notes:

1. Noise figure of gain block.
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 below the analog channels.

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General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE 01 (formerly SCTE IPS-SP-400) Compliant Sealed CamPort®
Power Adaptor	12 VDC/500 mA Output, UL, PTC Short-Circuit Protected, Self-Resetting
Dimensions/Weight	5.9" W x 2.9" H x 1.35" D / 0.84 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

VRA900/ACP	8 Amplified Unity Gain Outputs + 1 VoIP Port. AC Power Adaptor & Power Inserter 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

