

# CSZAPDU9VP



HomeConnect® Passive VoIP Amplifier, unity forward/reverse, 1.2GHz  
/nine ports

**OBSOLETE**

## Product Classification

**Product Type**

RF amplifier

**Product Brand**

HomeConnect®

## General Specifications

**Device Type**

All ports down amplifier | Two-way subscriber amplifier | VoIP subscriber amplifier

**Application**

Indoor | Outdoor

**Patent Number**

7912431 (expires 8/2/2025)

**Video Ports, quantity**

8

**Video Standard**

NTSC

**VoIP Passive Ports, quantity**

1

## Electrical Specifications

**Distortion Performance (CCN), minimum**

55 -dBc

**Distortion Performance (CSO), minimum**

62 -dBc

**Distortion Performance (CTB), minimum**

73 -dBc

**Distortion Performance (DSO), minimum**

55 -dBc

**Distortion Performance (DTO), minimum**

60 -dBc

**Distortion Performance (X-Mod), minimum**

70 -dB

**Group Delay, 1st channel, maximum**

30 ns

**Group Delay, channel 3, maximum**

15 ns

**Group Delay, channel 4–6, maximum**

5 ns

# CSZAPDU9VP

---

<b>Group Delay, reverse, maximum</b>	20 ns
<b>Hum Modulation, minimum</b>	-75 dB
<b>Impedance</b>	75 ohm
<b>Operating Current at Voltage</b>	380 mA @ 12 Vdc
<b>Shielding Effectiveness, minimum</b>	120 dB
<b>Surge Capability Test Method</b>	ANSI/SCTE 81   IEEE C62.45-2002 (Category B Combination Wave on Input Port, Category A Ring Wave on all other ports)
<b>Surge Capability Waveform</b>	1.2/50 voltage and 8/20 current combination waveform   100 kHz ring wave waveform

## Electrical Specifications, Isolation

<b>Isolation at Frequency Band, output to output, minimum</b>	22 dB @ 1002–1218 MHz   22 dB @ 54–1002 MHz   25 dB @ 5–42 MHz
<b>Isolation at Frequency Band, output to VoIP, minimum</b>	22 dB @ 1002–1218 MHz   22 dB @ 54–1002 MHz   25 dB @ 5–42 MHz
<b>Isolation at Frequency Band, VoIP to output, minimum</b>	22 dB @ 1002–1218 MHz   22 dB @ 54–1002 MHz   25 dB @ 5–42 MHz

## Electrical Specifications, Rx (Uplink)

<b>Flatness</b>	±0.5 dB
<b>Gain Tolerance, video ports</b>	0.0 dB ±1.0
<b>Insertion Loss, video ports</b>	0 dB
<b>Return Loss, minimum</b>	20 dB
<b>Noise Figure, maximum</b>	20 dB
<b>Operating Frequency Band</b>	5 – 42 MHz

## Electrical Specifications, Tx (Downlink)

<b>Flatness</b>	±0.75 dB
<b>Gain Tolerance, video</b>	0.0 dB ±1.25
<b>Noise Figure, maximum</b>	9 dB
<b>Operating Frequency Band</b>	54 – 1218 MHz
<b>Return Loss, minimum</b>	20 dB

## Electrical Specifications, VoIP

<b>Insertion Loss Rx, VoIP ports, maximum</b>	4.5 dB
---	--------

# CSZAPDU9VP

<b>Insertion Loss Tx, VoIP ports, maximum</b>	5.5 dB
<b>Return Loss, VoIP ports, minimum</b>	20 dB

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Safety Standard</b>	CE   SCTE

## Packaging and Weights

<b>Height, packed</b>	230.124 mm   9.06 in
<b>Width, packed</b>	290.068 mm   11.42 in
<b>Length, packed</b>	415.036 mm   16.34 in
<b>Carton Quantity</b>	20
<b>Included</b>	Power adapter
<b>Weight, gross</b>	8.31 kg   18.32 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## Included Products

CSAPAE612V500	- Power Adapter for Subscriber Amplifiers, ac/dc, 12 V, 500 mA, EISA VI
---------------	---

## \* Footnotes

<b>Distortion Performance (CCN), minimum</b>	CCN—Composite Carrier to Noise; 77 analog, 110 digital—256 QAM channel loading
<b>Distortion Performance (CSO), minimum</b>	CSO—Composite Second Order; 77 analog, 110 digital—256 QAM channel loading
<b>Distortion Performance (CTB), minimum</b>	CTB—Composite Triple Beat; 77 analog, 110 digital—256 QAM channel loading
<b>Distortion Performance (DSO), minimum</b>	DSO—Discrete Second Order; 13 MHz and 19 MHz, 55 dBmV per carrier loading
<b>Distortion Performance (DTO), minimum</b>	DTO—Discrete Third Order; 13 MHz and 19 MHz, 55 dBmV per carrier loading
<b>Distortion Performance (X-Mod), minimum</b>	X-Mod—Cross Modulation; 77 analog, 110 digital—256 QAM channel loading
<b>Group Delay, 1st channel, maximum</b>	Channel (3.58 MHz Span)

# CSZAPDU9VP

---

<b>Group Delay, channel 3, maximum</b>	Channel (3.58 MHz Span)
<b>Group Delay, channel 4–6, maximum</b>	Channel 2 (3.58 MHz Span)
<b>Noise Figure, maximum</b>	Total amplifier contribution
<b>Noise Figure, maximum</b>	Total amplifier contribution