

HomeConnect® Passive VoIP Amplifier, unity forward/reverse, 1.2GHz / five ports, with power inserter

OBSOLETE

Product Classification

 Product Type
 RF amplifier

 Product Brand
 HomeConnect®

General Specifications

Device TypeAll ports down amplifier | Two-way subscriber

amplifier | VoIP subscriber amplifier

Application Indoor | Outdoor

Patent Number 7912431 (expires 8/2/2025)

Video Ports, quantity 4

Video Standard NTSC

VoIP Passive Ports, quantity

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

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Group Delay, reverse, maximum20 nsHum Modulation, minimum-75 dBImpedance75 ohm

Operating Current at Voltage 380 mA @ 12 Vdc

Shielding Effectiveness, minimum 120 dB

Surge Capability Test Method ANSI/SCTE 81 | IEEE C62.45-2002 (Category B

Combination Wave on Input Port, Category A Ring Wave on

all other ports)

Surge Capability Waveform 1.2/50 voltage and 8/20 current combination

waveform | 100 kHz ring wave waveform

Electrical Specifications, Isolation

Isolation at Frequency Band, output to output, minimum 22 dB @ 1002-1218 MHz | 22 dB @ 54-1002 MHz | 25

dB @ 5-42 MHz

 Isolation at Frequency Band, output to VoIP, minimum
 22 dB @ 1002-1218 MHz | 22 dB @ 54-1002 MHz | 25

dB @ 5-42 MHz

Isolation at Frequency Band, VoIP to output, minimum 22 dB @ 1002-1218 MHz | 22 dB @ 54-1002 MHz | 25

dB @ 5-42 MHz

Electrical Specifications, Rx (Uplink)

Flatness $\pm 0.5 \, dB$

Gain Tolerance, video ports 0.0 dB ±1.0

 Insertion Loss, video ports
 0 dB

 Return Loss, minimum
 20 dB

 Noise Figure, maximum
 20 dB

Operating Frequency Band 5 – 42 MHz

Electrical Specifications, Tx (Downlink)

Flatness ±0.75 dB

Gain Tolerance, video 0.0 dB ±1.25

Noise Figure, maximum 9 dB

Operating Frequency Band 54 – 1218 MHz

Return Loss, minimum 20 dB

Electrical Specifications, VoIP

Insertion Loss Rx, VoIP ports, maximum 4.5 dB



Insertion Loss Tx, VoIP ports, maximum5.5 dBReturn Loss, VoIP ports, minimum20 dB

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$

Safety Standard CE | SCTE

Packaging and Weights

 Height, packed
 230.124 mm | 9.06 in

 Width, packed
 290.068 mm | 11.42 in

 Length, packed
 415.036 mm | 16.34 in

Carton Quantity 20

Included Power adapter

Weight, gross 8.278 kg | 18.25 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



Included Products

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

CSHMPIE – HomeConnect® Power Inserter for Subscriber Amplifiers with High Isolation, Copper Nickel

Plated Zinc Housing

* Footnotes

Distortion Performance (CCN), minimum CCN—Composite Carrier to Noise; 77 analog, 110 digital—256 QAM channel

loading

Distortion Performance (CSO), minimum CSO—Composite Second Order; 77 analog, 110 digital—256 QAM channel loading

Distortion Performance (CTB), minimum CTB-Composite Triple Beat; 77 analog, 110 digital-256 QAM channel loading

Distortion Performance (DSO), minimumDSO-Discrete Second Order; 13 MHz and 19 MHz, 55 dBmV per carrier loading

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Distortion Performance (DTO), minimum DTO—Discrete Third Order; 13 MHz and 19 MHz, 55 dBmV per carrier loading

Distortion Performance (X-Mod), minimum X-Mod—Cross Modulation; 77 analog, 110 digital—256 QAM channel loading

Group Delay, 1st channel, maximum Channel (3.58 MHz Span)

Group Delay, channel 3, maximum Channel (3.58 MHz Span)

Group Delay, channel 4–6, maximum Channel 2 (3.58 MHz Span)

Noise Figure, maximum Total amplifier contribution

Noise Figure, maximum Total amplifier contribution

