

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

Page 1 of 8



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

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 $\pm 0.75 \text{ dB}$

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

COMMSC PE°

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

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ 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

COMMSCOPE®

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



CSAPAE612V500



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

Product Classification

Product Type RF amplifier power adapter

Product Brand HomeConnect®

General Specifications

Plug Type Type A

Electrical Specifications

Output Voltage Ripple, maximum

Input Current, maximum 190 mA

Input Voltage, specific 100-240 Vac @ 50-60 Hz

150 mVpp

Output Load Regulation Tolerance, maximum ±5%

Output Power, maximum 6.0 W

Inrush Current, maximum 30 A

Operating Current at Voltage 500 mA @ 12 Vdc

Environmental Specifications

Energy Efficiency Standard EISA 2016, Level 6

Safety Standard c-UL-us

Packaging and Weights

 Height, packed
 360.68 mm | 14.2 in

 Width, packed
 304.8 mm | 12 in

 Length, packed
 594.36 mm | 23.4 in

Carton Quantity 100

COMMSCOPE®

CSAPAE612V500

Weight, gross

11.34 kg | 25 lb

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



CSHMPIE



HomeConnect® Power Inserter for Subscriber Amplifiers with High Isolation, Copper Nickel Plated Zinc Housing

Product Classification

 Product Type
 Power inserter

 Product Brand
 HomeConnect®

General Specifications

Device Type Power inserter

Application Directs power to the amplifiers by combining the power

and RF paths directly

Electrical Specifications

Insertion Loss at Frequency Band, maximum 0.5 dB @ 5-1002 MHz | 0.8 dB @ 1002-1218

MHz | 1 dB @ 1275-1800 MHz

Return Loss at Frequency Band, input, minimum 15 dB @ 1275–1800 MHz | 20 dB 5–1218 MHz

Return Loss at Frequency Band, output, minimum 15 dB @ 1275-1800 MHz | 20 dB 5-1218 MHz

Operating Current at Voltage 1.5 A @ 25 Vdc

Operating Frequency Band 5 – 1800 MHz

Shielding Effectiveness 105

Surge Capability Test Method ANSI/SCTE 81 | IEEE C62.41-B3 (6 kV, 3000 A,

Combination wave) on all ports

Voltage Range 8–25 Vdc

Electrical Specifications, Isolation

Isolation at Frequency Band, power port to input, minimum 65 dB @ 1275-1800 MHz | 70 dB @ 800-1218

MHz | 75 dB @ 5-800 MHz

Isolation at Frequency Band, power port to TV, minimum 65 dB @ 1275-1800 MHz | 70 dB @ 800-1218

MHz | 75 dB @ 5-800 MHz

Mechanical Specifications

COMMSCOPE®

CSHMPIE

Transportation Vibration Standard

Category A

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$

Operating Humidity 5%-95%

Operating Altitude -60 meters to 4,000 meters AMSL

Packaging and Weights

 Height, packed
 219.964 mm | 8.66 in

 Width, packed
 219.964 mm | 8.66 in

 Length, packed
 549.91 mm | 21.65 in

Carton Quantity 400

Weight, gross 17.799 kg | 39.24 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





