

CSMF1APDU5VPI

HomeConnect® Passive VoIP MoCA Amplifier, unity forward/reverse, 85 MHz return, five ports, with power inserter



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	4
Video Standard	NTSC
VoIP Passive Ports, quantity	1

Electrical Specifications

Distortion Performance (CCN), minimum	60 -dBc
Distortion Performance (CSO), minimum	65 -dBc
Distortion Performance (CTB), minimum	73 -dBc
Distortion Performance (DSO), minimum	55 -dBc
Distortion Performance (DTO), minimum	60 -dBc
Distortion Performance (X-Mod), minimum	73 -dB
Group Delay, 2nd 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, maximum	25 ns
Hum Modulation, minimum	-75 dB
Impedance	75 ohm
Operating Current at Voltage	380 mA @ 15 Vdc
Shielding Effectiveness, minimum	100 dB
Surge Capability Test Method	ANSI/SCTE 81 IEEE C62.41-B3 (6 kV, 3000 A, Combination wave) on all 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	25 dB @ 5–1002 MHz
Isolation at Frequency Band, output to VoIP, minimum	25 dB @ 5–1002 MHz
Isolation at Frequency Band, power port to RF output, minimum	60 dB @ 5–1002 MHz
Isolation at Frequency Band, VoIP to output, minimum	25 dB @ 5–1002 MHz

Electrical Specifications, MoCA

Band Rejection, output to input, minimum	40 dB
Band Rejection, VOIP to input, minimum	35 dB
Insertion Loss, output to output, maximum	35 dB
Insertion Loss, output to VOIP, maximum	35 dB
Insertion Loss, VOIP to output, maximum	35 dB
Operating Frequency Band	1125 – 1675 MHz

Electrical Specifications, Rx (Uplink)

Flatness	±1.0 dB
Insertion Loss, video ports	0 dB
Return Loss, minimum	20 dB
Noise Figure, maximum	18 dB
Operating Frequency Band	5 – 85 MHz

Electrical Specifications, Tx (Downlink)

Flatness	±1.0 dB
Gain, video ports	0 dB
Noise Figure, maximum	10.5 dB

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Operating Frequency Band	102 – 1002 MHz
Return Loss, minimum	20 dB
Electrical Specifications, VoIP	
Insertion Loss Rx at Frequency Band, VoIP ports, maximum	4.3 dB @ 5–42 MHz
Insertion Loss Tx at Frequency Band, VoIP ports, maximum	4.5 dB @ 54–550 MHz 6.0 dB @ 550-1002 MHz
Return Loss at Frequency Band, VoIP ports, minimum	20 dB @ 5–1002 MHz

Environmental Specifications

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Safety Standard	SCTE

Packaging and Weights

Height, packed	190.5 mm 7.5 in
Width, packed	247.65 mm 9.75 in
Length, packed	508 mm 20 in
Carton Quantity	20
Included	Power adapter Power inserter
Weight, gross	9.072 kg 20 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



Included Products

CMD/CSAPAE615V500	–	Power Adapter for Subscriber Amplifiers, CMD, ac/dc, 15 V, 500 mA, EISA VI
CSHMPIE	–	HomeConnect® Power Inserter for Subscriber Amplifiers with High Isolation, Copper Nickel Plated Zinc Housing

* Footnotes

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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), minimum	DSO—Discrete Second Order; 13 MHz and 19 MHz, 55 dBmV per carrier loading
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, 2nd 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

CMD/CSAPAE615V500



Power Adapter for Subscriber Amplifiers, CMD, ac/dc, 15 V, 500 mA, EISA VI

Product Classification

Product Type	RF amplifier power adapter
Product Brand	HomeConnect®

General Specifications

Plug Type	Type A
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Electrical Specifications

Input Current, maximum	190 mA
Input Voltage, specific	100-240 Vac @ 50-60 Hz
Output Load Regulation Tolerance, maximum	±5%
Output Power, maximum	7.5 W
Output Voltage Ripple, maximum	150 mVpp
Inrush Current, maximum	30 A
Operating Current at Voltage	500 mA @ 15 Vdc

Environmental Specifications

Energy Efficiency Standard	EISA 2016, Level 6
Safety Standard	c-UL-us

Packaging and Weights

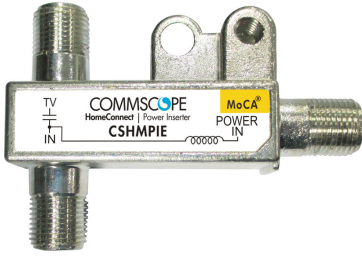
Height, packed	360.68 mm 14.2 in
Width, packed	304.8 mm 12 in
Length, packed	594.36 mm 23.4 in
Carton Quantity	100

CMD/CSAPAE615V500

Weight, gross

11.34 kg | 25 lb

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

Transportation Vibration Standard

Category A

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °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

