

## Description

The Z-330W is an ANSI-compliant, compact, wall-mount customer premises equipment (CPE) filter designed to expedite the service delivery and improve the performance of digital subscriber line (DSL) and home phonenumber network (HPN) services over plain old telephone service (POTS). The Z-330W filters all telephones, facsimile (fax) machines, answering machines, and other telephone equipment. Its filter design electronically isolates the high-speed DSL and HPN data streams from the voice-band POTS to provide premium voice quality and optimal DSL and HPN data rates.

The Z-330W meets the rigorous performance requirements of ANSI T1.421 and provides a convenience jack for DSL or HPN connections.

## Features

- Isolate telephone equipment impedances from the xDSL and HPN systems
- Blocks xDSL and HPN signals from voice-band equipment
- Provides a DSL convenience jack for connecting a DSL modem or HPN device
- Meets ANSI T1.421 (2001) North American DSL filter standard
- Compatible with all major xDSL standards including ADSL Full Rate (ITU-T G.992.1), ADSL G.Lite (ITU-T G.992.2), ADSL2 (ITU-T G.992.3 and .4), ADSL2+ (ITU-T G.992.5 in analog mode), ADSL2++, VDSL (ITU-T G.993.1), VDSL2; also V.90 and Metallic Loop Testing compatible
- Compliant with UL / CSA 60950, FCC CFR 47 Part 68



*The Z-330W meets ANSI filter standards and also offers an unfiltered connection for a DSL modem or HPN device*

## Applications

Installation of the Z-330W wall-mount filter is quick and easy. The DSL user simply removes and disconnects the wall phone, connects the Z-330W filter to the wall, aligns the filter with the mounting screws of the wall plate, slides into place, and reconnects and attaches the wall phone.

The DSL user installs an Excelsus filter into each telephone line jack in the subscriber's premises that contains voice-band equipment devices, including corded/cordless telephones, answering machines, fax machines, 56Kb/s and lower rate modems, automatic dialers, recorder connectors and satellite television set-top boxes.

The Z-330W xDSL/POTS CPE wall-mount filter is one of many filters manufactured by Excelsus for subscriber installed digital services within homes, offices, and hotels. Excelsus is the number one selling brand of DSL filters worldwide.

## Z-330W xDSL/POTS CPE Wall-Mount Filter

<b>Z-BLOCKER® Z-330W Wall-Mount Filter Specifications per ANSI T1.421 for ADSL/POTS CPE Microfilters</b>	
<b>DC Resistance</b>	
Network port at 20mA	<25 Ω
Tip and Ring to Ground at ≤ 100 Vdc	>10 MΩ
Tip and Ring to Ground at ≥ 100 Vdc and ≤ 200 Vdc	>30 kΩ
<b>Operating Current</b>	5 to 90 mA
<b>Operating Voltages</b>	
Network tip to ring	0 to -80 Vdc
Network tip to ring level with ringing signal of 17 to 23Hz and 40 to 106 Vrms	-20 to -80 Vdc
<b>On-hook Voice Band Insertion Loss</b>	
Single filter	-0.5dB to 1.5dB
With 5 filters	-1.0dB to 6.5dB
<b>On- or Off-hook Envelope Delay 300 Hz - 2800 Hz</b>	<250μs
<b>Off-hook Voice Band Insertion Loss</b>	
Single filter	-0.5dB to 0.5dB
With 5 filters	-1.0dB to 1.0dB
<b>Off-hook Voice Band Insertion Loss Distortion</b>	
Single filter, 200 to 3400 Hz	-1.0dB to 0.5dB
With 5 filters, 200 to 3400 Hz	-1.5dB to 2.5dB
Single filter, 3.4 to 4 kHz	-1.5dB to 1.0dB
With 5 filters, 3.4 to 4 kHz	-2.0dB to 3.25dB
<b>Off-hook impedance distortion</b>	
Phone Port      SRL Low	>13 dB
“                    ERL	>9 dB
“                    SRL High	>3 dB
Network Port    SRL Low	>12 dB
“                    ERL	>10 dB
“                    SRL High	>5 dB
<b>Inter-Modulation Distortion Second and Third order products</b>	>57 dB and >60 dB, respectively
<b>On-hook High Band Stopband Attenuation</b>	
From 25 kHz to 12 MHz, between 20 and 90 mA	>12 dB
<b>Off-hook High Band Stopband Attenuation</b>	
From 25 to 50 kHz, between 20 and 90 mA	>21 dB
From 25 to 50 kHz, between 7 and 20 mA	>13 dB
From 50 k to 12 M Hz, between 20 and 90 mA	>25 dB
From 50 k to 12 M Hz, between 7 and 20 mA	>22 dB
<b>Bridging Loss</b>	
Single filter, 25 kHz to 1.2 MHz	<0.5 dB
With 5 filters, 25 kHz to 1.2 MHz	<1.25 dB
Single filter, 25 kHz to 12 MHz	<3.0 dB
With 5 filters, 25 kHz to 12 MHz	<4.0 dB
Connectors: One RJ11 jack for Phone connection, One RJ11 jack for DSL/HPN connection, and one RJ11 plug on a 4” cord for Line connection	
Dimensions: Height = 4.5in (114mm), Width = 3.0in (76.2mm), Depth = 0.91in (23.1mm)	
Weight: approx. 75g	
UL / CSA 60950, FCC CFR 47 Part 68	



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