

# Z-BLOCKER® Z-330CW xDSL/POTS CPE Wall-Mount Filter

### **Description**

The Z-330CW 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 phoneline network (HPN) services over plain old telephone service (POTS). The Z-330CW 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-330CW 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 voiceband 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, and IC CS-03



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

## **Applications**

Installation of the Z-330CW wall-mount filter is quick and easy. The DSL user simply removes and disconnects the wall phone, connects the Z-330CW filter to the wall, aligns the filter with the mounting screws of the wall plate, slides the filter's locking tabs in 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-330CW 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-330CW xDSL/POTS CPE Wall-Mount Filter

Z-BLOCKER® Z-330CW Wall-Mount Filter Specifications per ANSI T1.421 for	ADSL/POTS CPE Microfilters
DC Resistance	
Network port at 20mA	<25 Ω
Tip and Ring to Ground at < 100 Vdc	>10 MΩ
Tip and Ring to Ground at $\geq 100$ Vdc and $\leq 200$ Vdc	>30 kΩ
Operating Current	5 to 90 mA
Operating Voltages	
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
On-hook Voice Band Insertion Loss	
Single filter	-0.5dB to 1.5dB
With 5 filters	-1.0dB to 6.5dB
On- or Off-hook Envelope Delay 300 Hz - 2800 Hz	<250μs
Off-hook Voice Band Insertion Loss	25 0 μ5
Single filter	-0.5dB to 0.5dB
With 5 filters	-1.0dB to 1.0dB
Off-hook Voice Band Insertion Loss Distortion	1.000 to 1.000
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
Off-hook impedance distortion	2.0dB to 3.23dB
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
Inter-Modulation Distortion Second and Third order products	>57 dB and >60 dB, respectively
On-hook High Band Stopband Attenuation	t and and so and, respectively
From 25 kHz to 12 MHz, between 20 and 90 mA	>12 dB
Off-hook High Band Stopband Attenuation	> 12 dB
From 25 to 50 kHz, between 20 and 90 mA	>21 JD
,	>21 dB >13 dB
From 25 to 50 kHz, between 7 and 20 mA	>13 dB >25 dB
From 50 k to 12 M Hz, between 20 and 90 mA From 50 k to 12 M Hz, between 7 and 20 mA	>23 dB >22 dB
,	>22 QB
Bridging Loss	20.5 JD
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, and IC CS-03 certified	



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