

**Description**

The Z-330P2J is a small, in-line, ANSI T1.421-compliant customer premise equipment (CPE) filter designed to expedite the service delivery and improve the performance of asymmetric digital subscriber line (ADSL) and home phoneline network (HPN) services over plain old telephone service (POTS). The Z-330P2J filters all telephones, facsimile (fax) machines, answering machines, and other telephone equipment. Its third-order filter design electronically isolates the high-speed ADSL and HPN data streams from the voice-band POTS to provide premium voice quality and optimal DSL and HPN data rates.

**Features**

- Isolates telephone equipment impedances from the ADSL and HPN systems
- Blocks ADSL and HPN signals from voice-band equipment up to 10 Megahertz
- Provides a DSL convenience jack for connecting a DSL modem or HPN device
- Meets ANSI T1.421 (2001) North American DSL filter standard
- ITU-T G.992.1 (Full Rate) and G.992.2 (G.Lite), V.90 and Metallic Loop Testing compatible
- Compliant with UL / CSA 60950, FCC CFR 47 Part 68, and IC CS-03
- CE Mark Certified



*Z-330P2J ADSL over POTS CPE In-Line Filter*

**Applications**

The DSL user installs the Z-330P2J in-line filter into each telephone line jack in the subscribers' 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-330P2J in-line filter is one of many filters and splitters 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-BLOCKER<sup>®</sup> Z-330P2J ADSL over POTS CPE In-Line Filter

<b>Z-BLOCKER<sup>®</sup> Z-330P2J 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-hook Voice Band Insertion Loss Distortion</b>		
Single filter, 200 to 1000 Hz		-1.5dB to 1.5dB
With 5 filters, 200 to 1000 Hz		-5.5dB to 2.0dB
Single filter, 1 to 2.8 kHz		-1.5dB to 1.5dB
With 5 filters, 1 to 2.8 kHz		-2.0dB to 2.0dB
<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>		
		>60 dB
<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 each for ADSL Modem and Phone connection, and one RJ11 plug on a 4” cord for Line connection		
Dimensions: Length = 2.04in (51.9mm), Width = 1.21in (30.8mm), Height = 0.710in (18.0mm)		
Compliant and listed with UL / CSA 60950, FCC CFR 47 Part 68, IC CS-03, and CE Mark		



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