

Description

The CP-404TJ45 is a small, wall-mountable, ETSI-compliant customer premise equipment (CPE) splitter designed to expedite the service delivery and improve the performance of digital subscriber line (DSL) services over plain old telephone service (POTS) and integrated services digital network (ISDN). The CP-404TJ45 splitter filters all ISDN devices, telephones, facsimile (fax) machines, answering machines, and other telephone equipment. Its design electronically isolates the high-speed DSL data stream from ISDN- and voice-band frequencies to provide premium voice quality and optimal DSL and ISDN data rates.

Features

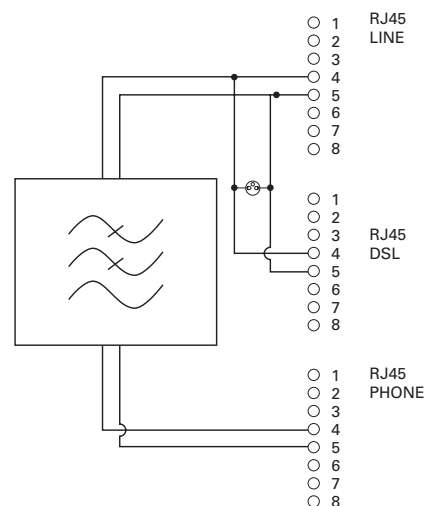
- Isolates telephone equipment impedances from xDSL
- Blocks xDSL signals from ISDN- and voice-band equipment
- Provides RJ45 connection interfaces
- Provides a DSL convenience jack for connecting a DSL modem or HPN device
- Meets ETSI TS 101 952-1-4 v1.1.1 (2002-11) requirements for POTS and both 135 Ohm and 150 Ohm ISDN impedances
- 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
- Designed to meet ITU-T K.21 for over-voltage and over-current protection, up to 10kV
- CE Mark certified



The CP-404TJ45 wall-mount splitter is available with RJ45 connection interfaces

Applications

The DSL provider or DSL user installs the CP-404TJ45 splitter as the first connection to the subscribers' phone line to isolate all ISDN- and voice-band equipment connected to that line, including corded/cordless telephones, answering machines, fax machines, 56Kb/s and lower-rate modems, automatic dialers, and recorder connectors. The CP-404TJ45 splitter may also be used to isolate a satellite television set-top box. The CP-404TJ45 splitter is one of many splitters and 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.



CP-404TJ45 Schematic



Z-BLOCKER® CP-404TJ45 xDSL over POTS & ISDN CPE Splitter

Z-BLOCKER® CP-404TJ45 Splitter Specifications per ETSI TS 101 952-1-4 for ADSL over POTS/ISDN CPE Splitters

ISDN Impedances	135Ω and 150Ω
DC Feeding Current	0 to 60mA
L1-to-L2 DC Operating Voltage	100VDC
DC Resistance from L1 & L2 to Ground (PSTN and POTS/ISDN interface opened)	>20MΩ
L1-to-L2 DC Resistance (PSTN and POTS/ISDN interface opened)	>5MΩ
L1-to-L2 DC Resistance (PSTN and POTS/ISDN interface shorted)	<12.5Ω
POTS Pass Band Insertion Loss at 1kHz	<1.0dB
ISDN Pass Band Insertion Loss at 1kHz	
1 – 60kHz with ADSL connected	<1.2dB
60 – 80kHz with ADSL connected	<2.0dB
1 – 60kHz with ADSL not connected	<1.5dB
60 – 80kHz with ADSL not connected	<2.5dB
POTS Pass Band Insertion Loss Distortion	
0.3 – 0.6kHz and 1.6 – 3.4kHz	<±1.0dB
0.6 – 1.6kHz	<±0.5dB
POTS Pass Band Return Loss	
0.3 – 0.6kHz and 1.7 – 3.4kHz	>12dB
0.6 – 1.7kHz	>15dB
ISDN Pass Band Return Loss	
1 – 60kHz with ADSL connected	>16dB
60 – 80kHz with ADSL connected	>14dB
1 – 60kHz with ADSL not connected	>12dB
60 – 80kHz with ADSL not connected	>10dB
ADSL Stop Band Attenuation	
138 – 2208kHz using POTS impedance at POTS/ISDN port	>55dB
138 – 150kHz using ISDN impedance at POTS/ISDN port	>55dB
150 – 1104kHz using ISDN impedance at POTS/ISDN port	>65dB
1104 – 2208kHz using ISDN impedance at POTS/ISDN port	>55dB
POTS Band Intermodulation Distortion at –9dBm measured at POTS/ISDN port	
Second Order	≥57dB
Third Order	≥60dB
POTS Band Delay Distortion	
0.2 – 0.6kHz and 3.2 – 4.0kHz	≤250μs
0.6 – 3.2kHz	≤200μs
ISDN Band Delay Distortion at up to 80kHz	<20μs
ADSL Insertion Loss	
120 – 170kHz	<3dB
170 – 1104kHz	<1dB
POTS Transient Voltage during on- and off-hook transitions at <15kHz	<2Vp-p
Connectors: One RJ11 or RJ45 jack each for DSL, Phone, and Line connections	
Dimensions: 102mm length x 54mm width x 23mm height	
Weight = approximately 65g	
Designed to meet ITU-T K.21 for over-voltage and over-current protection, up to 10kV	
CE Mark certified	



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