



# **Product Specification**

Product Name CPPCA008

Product Type Customer Premise Splitter

System Application ADSL Over POTS

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A.C.E.

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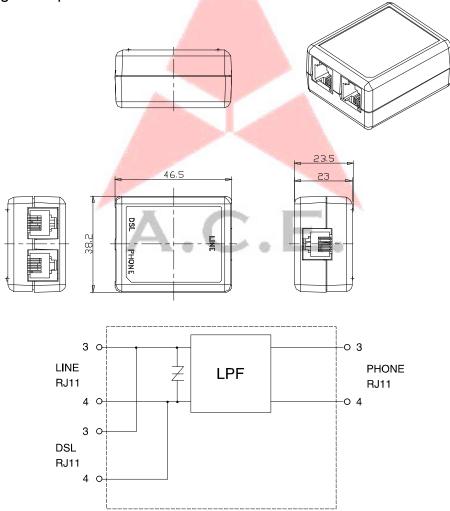
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The CPPCA008 is a splitter module that has been specifically designed to implement the functionality of low pass filter in POTS over ADSL application.

The CPPCA008 integrate low pass filter that block the high frequency energy from reaching the POTS device and provide isolation from impedance effects of the POTS device on ADSL. In addition, these filter will also attenuate any wideband impulse noise generated by the POTS device due to the interruption of loop current (e.g. pulse dialing or on hook / off hook transfer) Because the POTS splitter connects directly to the subscriber loop media, it must also provide some protection for externally induced line hits or faults which could damage any attached equipment or endanger humans interacting with the installed equipment. The circuit protection will be provided mostly by standard central office line protection means and additional protection measures built into pots splitter to protect against line overstress which could damage the splitter itself.



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Reference:

ITU-T K.21

ETSI ETS 300 001 Attachments to Public Switched Telephone Network (PSTN); General

technical requirements for equipment connected to an analogue

subscriber interface in the PSTN

ITU G.992.x Asymmetric Digital Subscriber Line (ADSL) Transceivers

India spec. ASYMMETRIC DIGITAL SUBSCRIBER LINE (ADSL) MODEM

(REMOTE TERMINAL)-GENERIC REQUIREMENTS

NO. G/ANE-05/01.SEP'99

MII YD/T 1055-2000 The test method for full-rate ADSL system with POTS splitter

Resistibility of telecommunication switching equipment to

Overvoltages and overcurrents

ITU-T Q.552 SERIES Q: SWITCHING AND SIGNALLING, Digital exchanges -

Transmission characteristics, Transmission characteristics at 2-wire

analogue interfaces of digital exchanges

#### Requirements:

Title		Conditions	
DC resistance	<=25.0 ohm	Tip to Ring at the POTS interface with the U-R interface shorted.	
Insertion loss ( <b>Zreal(1)</b> )	< 0.3 dB	@ 1 kHz	
Insertion loss distortion ( <b>Zreal(1)</b> )	<± 1 dB	200 Hz to 4 kHz (relative to 1 kHz)	
Detume less et TELE ment	> 14 dB	300 Hz to 500 Hz	
Return loss at TELE port ( <b>Zreal(1)</b> )	> 18 dB	500 Hz to 2000 Hz	
	> 14 dB	2000 Hz to 3400 Hz	
Unbalance about earth	> 58 dB	200 Hz to 1 kHz	
(LCL & TCL) ( <b>Zreal(1)</b> )	> 53 dB	1 kHz to 3 kHz	
One we delevidintention	< 250 usec	200 Hz to 600 Hz	
Group delay distortion ( <b>Zreal(1)</b> )	< 200 usec	600 Hz to 3.2 kHz	
	< 250 usec	3.2 kHz to 4 kHz	
Frequencies and levels for pulse metering (in <b>200</b> $\Omega$ )	<5 dB	12/16 kHz ± 1 %	
Stop band attenuation (Zreal(1) & ZRHF)	> 50 dB	32 kHz to 2208 kHz	
Input impedance (loading of ADSL signal path)	< 0.25 dB	32 kHz to 2208 kHz	

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#### **Revision History:**

Rev.	Author	Approved by	Description of change	Issued date
0	Alvin	Sundi	New release	2011/08/31

