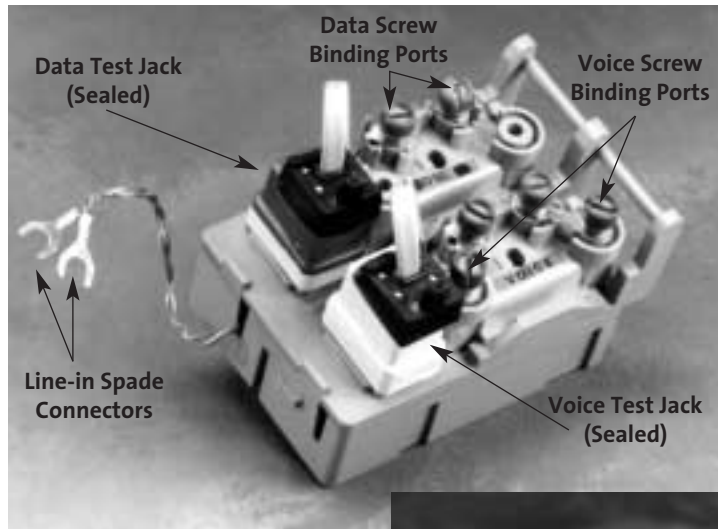


xDSL POTS Splitter CAC® 7600 Dual Line Module



Part Number SPS-DL1-SR1 shown



Photos
DSL06
DSL07

Features / Benefits

- Dual-wide line module package for the CAC® 7600 series NID
- Standard RJ11 test jacks for VOICE and DATA
- Dual line module available with sealed and non-sealed RJ11 jacks
- ANSI T1.413 compliant
- UL-listed to U.S. and Canadian safety standards
- FCC Part 68 compliant
- Environmentally hardened
- Maintenance test signature included as standard
- ADSL and VDSL configurations available
- Other configuration options available upon request

Description

Corning Cable Systems' xDSL POTS Dual Line Module is designed for use at the subscriber premises. xDSL represents Digital Subscriber Line, which provides high-bit-rate digital information over telephone subscriber lines. The term "POTS" means Plain Old Telephone Service. The POTS Splitter is a passive device, which allows both voice and data signals to travel over the telephone line. This device splits the combined signal to provide separate outputs for both phone and data.

This device is a dual-wide line module for installation inside a Corning Cable Systems NID (Network Interface Device), CAC® 7600 module. The unit snaps into the NID and provides the subscriber with both voice and data lines within the same module. Screw terminals for the phone and data lines are provided for connection to the wiring within the home.

The xDSL POTS Dual Line Module is available for ADSL (Asymmetrical Digital Subscriber Line) or VDSL (Very-High-Data-Rate Digital Subscriber Line).

xDSL POTS Splitter CAC® 7600 Dual Line Module



ADSL Technical Specifications

Electrical (Complies with ANSI T1.413 Issue 2 Annex E)

DC Loop Current	0 to 100 mA
DC Loop Voltage (tip-to-ring)	0 to -60 Vdc
Ringing Signals	103 Vrms superimposed on the DC Loop Voltage, 20 to 30 Hz
DC Resistance	≤ 25 ohms, POTS tip-to-ring with Line port (U-R) shorted
Insertion Loss	≤ 1.0 dB; short loop, ZTc = 900, ZTr = 600, 1004 Hz ≤ 0.75 dB; long loop, ZTc = 900, ZTr = 600, 1004 Hz
Attenuation Distortion (Voice Band), increase relative to Insertion Loss at 1004 Hz	+1.5 to -1.5; 200 - 3.4 kHz, short loop, ZTc = 900, ZTr = 600 +2.0 to -2.0; 3.4 - 4.0 kHz, short loop, ZTc = 900, ZTr = 600 -0.5 to -1.5; 200 - 3.4 kHz, long loop, ZTc = 900, ZTr = 600 +1.0 to -1.5; 3.4 - 4.0 kHz, long loop, ZTc = 900, ZTr = 600
Delay Distortion (Voice Band) increase	≤ 200 μs; 600 - 3.2 kHz, short loop, ZTc = 900, ZTr = 600 ≤ 250 μs; 200 - 4.0 kHz, short loop, ZTc = 900, ZTr = 600 ≤ 200 μs; 600 - 3.2 kHz, long loop, ZTc = 900, ZTr = 600 ≤ 250 μs; 200 - 4.0 kHz, long loop, ZTc = 900, ZTr = 600
Return Loss (Voice Band)	> 6 dB ERL, > 5 dB SRL-L, > 3 dB SRL-H; short and long loop > 2 dB SRL-H; short and long loop, single frequency
Longitudinal Balance, Two Port Technique, POTS to Line port (U-R) and Line port (U-R) to POTS	> 58 dB; 200 - 1.0 kHz > straight line from 58 dB @ 1 kHz to 53 dB @ 3.0 kHz, Bias 25 mA DC,
Tip-to-Ring Capacitance POTS port	20 ≤ C ≤ 115 nF; 20 - 30 Hz (Note: T1.413 Issue 2 requires ≤ 90 nF, plans are to increase this in Issue 3 to ≤ 115 nF)
Capacitance to Ground, POTS port	≤ 1.0 nF; 20 - 30 Hz
ADSL Band Attenuation	> 65 dB; 30 - 300 kHz, ZTr = 600 > 55 dB; 300 - 1104 kHz, ZTr = 600
Input Impedance	≤ 0.25 dB; 30 - 1104 kHz, ZTr = 600

Environmental

Lightning Surge	GR-1089-CORE Level 1 and Level 2 surge
Power Cross	GR-1089-CORE First and Second Level AC Power Fault Immunity
Operating Temperature	-40 to +65°C (-40 to 149°F)
Relative Humidity	0 to 95%, non-condensing

Safety

- UL-listed to U.S. and Canadian safety standards
- FCC Part 68 compliant

VDSL POTS Splitter-Customer Premises Specifications

Electrical Network Environment

Frequency Spectrum	POTS Passband: DC - 4 K ISDN Passband: 8 k-120k Stopband: 800 k - 10 MHz
Test terminations (ZTR) ohms	POTS = 600 ohms ISDN(2B1Q) / LINE = 100 ohms ISDN(4B3T) / LINE = 100 ohms VDSL = through HPF

continued on next page

continued from previous page

VDSL POTS Splitter-Customer Premises Specifications *continued*

Maintenance / Test Signatures	None
DC Blocking / HPF	Optional
Environmental Considerations	-40 to 85°C (-40 to 185°F)
DC Characteristics	
Series Resistance	6 ohms max, measured from tip to ring on VOICE with LINE shorted
Insulation Resistance	10 ohms min. @ 100 VDC between terminals or terminal to ground
Operating Voltages	60 VDC with 100 V _{rms} superimposed
Operating Currents	150 mA with no degradation of performance characteristics
Capacitance	30 nF max. tip to ring
Passband (Voiceband) Characteristics	
Insertion Loss	1.0dB (600 ohms) max in POTS 1.0dB (100 ohms) max in ISDN
Return Loss	> 15 dB (600 ohms) in POTS > 15 dB (100 ohm) in ISDN
Longitudinal Balance	> 57 dB in POTS and ISDN
Stopband (DSL Band) Characteristics	
DSL Attenuation	60 dB min; 800k – 10 MHz

Product Specifications

Dimensions (H x W x D)	1.6 in x 2.2 in x 2.9 in (41 mm x 56 mm x 74 mm)
Weight	0.24 lb (0.11 kg)

Ordering Information

SPS-DL0-SR1	ADSL POTS Splitter CAC® 7600 Dual Line Module standard, w/out sealed jacks
SPS-DL1-SR1	ADSL POTS Splitter CAC® 7600 Dual Line Module with sealed jacks
SPS-DL5-NL6	VDSL POTS Splitter CAC® 7600 Dual Line Module with sealed jacks

xDSL POTS Splitter CAC® 7600 Dual Line Module



Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA • 1-800-743-2675 • FAX: 828-327-5973
International: 828-327-5000 • <http://www.corning.com/cablesystems> • Corning Cable Systems reserves the right to improve, enhance, and modify the features and specifications of Corning Cable Systems' products without prior notification. CAC is a registered trademark of Corning Cable Systems Brands, Inc. All other trademarks are the properties of their respective owners. © 2000, 2001 Corning Cable Systems. All Rights Reserved.
Printed in USA. • TEL-186B / May 2001 / 5M

