

xDSL POTS Splitter Main Distribution Frame-MDF

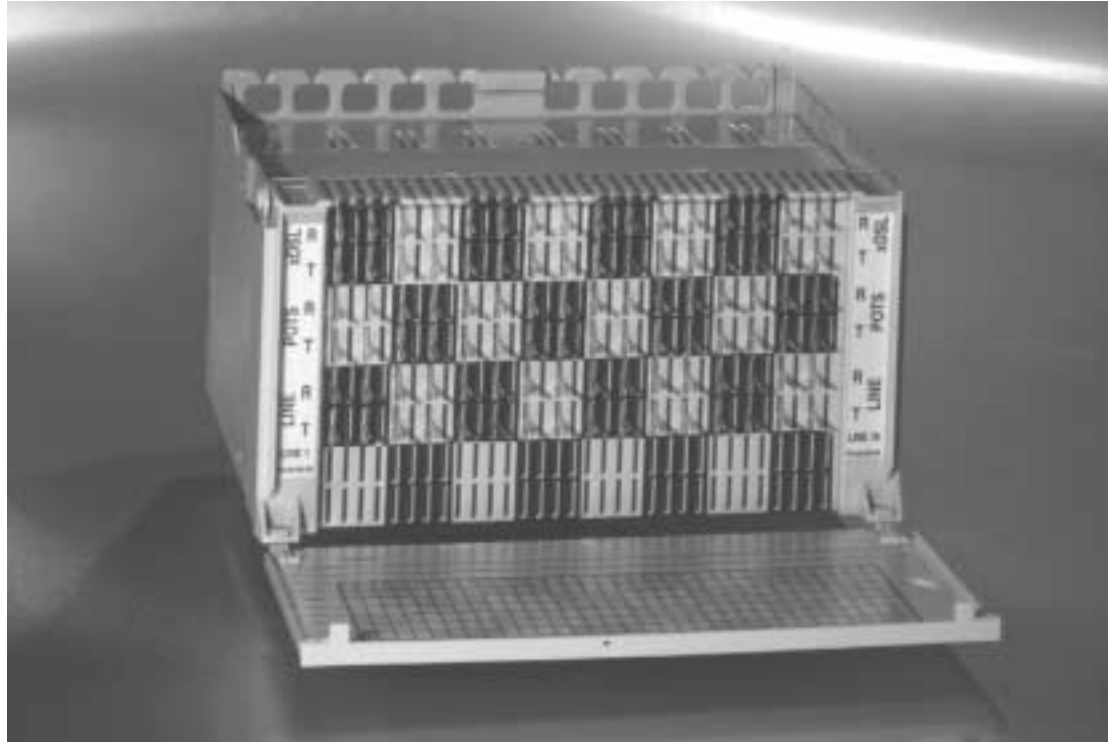


Photo
DSL 59

Features / Benefits

- Central office main distribution frame (MDF) 19-inch or 23-inch rack-mounting capability with bracket (not included), or wall-mount bracket (not included)
- ANSI T1.413 compliant
- 16-line capacity
- Single wire-wrap or punch-down termination for each port (LINE, VOICE, and DATA)
- Maintenance test signature is included as standard
- Other configuration options available upon request

Description

Corning Cable Systems' xDSL POTS Main Distribution Frame (MDF) is designed for use at the central office (CO) or the subscriber premise. 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 in the form of female jacks. This product is also available for Customer Premise Equipment (CPE) requiring multi-dwelling or multi-tenant application. For the central office, this device is designed to mount on the distribution side of a main distribution frame. Available with wire-wrap or punch-down terminations which provide connections of twisted pairs to the outside plant line, the POTS switch equipment and the xDSL transmission unit (ATU-C).

The xDSL MDF POTS Splitter contains eight circuit boards, each containing two splitter circuits, for a total capacity of sixteen lines. Each splitter circuit consists of a low pass filter for connection to the POTS switch equipment, plus DC blocking capacitors for connection to the xDSL transmission unit (CO only).

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ADSL Central Office 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, PSTN tip-to-ring with Line port (U-C) 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)	> 8 dB ERL, > 5 dB SRL-L, > 5 dB SRL-H; short and long loop > 2 dB SRL-H; short and long loop, single frequency
Longitudinal Balance, Two Port Technique, PSTN to Line port (U-C) and Line port (U-C) to PSTN	> 58 dB; 200 - 1.0 kHz > straight line from 58 dB @ 1 kHz to 53 dB @ 3.0 kHz, Bias 25 mA DC, xDSL port shorted
Tip-to-Ring Capacitance, PSTN 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, PSTN port	≤ 1.0 nF; 20 - 30 Hz
ADSL Band Attenuation	> 65 dB; 30 - 300 kHz, ZTc = 900 > 55 dB; 300 - 1104 kHz, ZTc = 900
Input Impedance	≤ 0.25 dB; 30 - 1104 kHz, ZTc = 900
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	
Installation Practice	
SRP-200-205	

ADSL CPE 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

Product Specifications

Dimensions (H x W x D)	4.0 in x 8.0 in x 6.5 in (102 mm x 203 mm x 165 mm)
Weight	5.07 lb (2.30 kg)

Shipping Package Specifications

Quantity	1 unit per carton
Dimensions (H x W x D)	9.0 in x 12.25 in x 12.25 in (229 mm x 311 mm x 311 mm)
Weight	6.94 lb (3.15 kg)

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