# **SUTTLE**

# DSL Line Conditioners



# **Outdoor POTS Splitter**

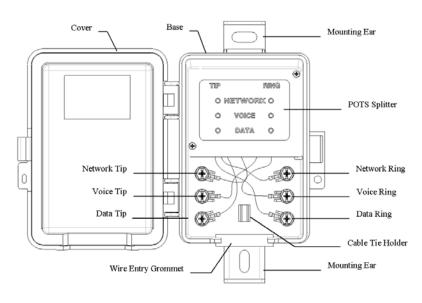
### **Product Description**

The Outdoor DSL POTS (Plain Old Telephone Service) Splitter allows voice and data signals to travel over the same telephone line and be separated at the customer premise. The 649A1 splits the incoming signal to provide separate outputs for filtered voice (phone) and ADSL (data) in the form of screw terminals. The Outdoor POTS Splitter is designed to be mounted on a wall or conduit next to a Network Interface Device (NID).

#### **Product Features**

- \* Outdoor housing for protection from environmental conditions
- \* Mounts to wall or conduit
- \* Terminals for Network, Voice, and Data
- \* ANSI T1.413 compliant
- \* FCC Registered; Complies with Part 68, FCC Rules

#### **Product Design**



### **Ordering Information**

<u>Part Number</u> <u>Description</u>

POTS Splitter with Outdoor Housing

Single-Line, Screw Terminals

**Dimensions** 

2.6"H x 3.5"W x 4.8"D

Specifications subject to change without notice. Copyright 2004. Rev. 1: 6/04.

649A1

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## **Product Specifications**

#### **ADSL Technical Specifications - 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 $V_{rms}$ 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)	+1.5 to -1.5 dB; 200 - 3.4 kHz, short loop, ZTc = 900, ZTr = 600
Increase Relative to Insertion Loss at 1004 Hz	+2.0 to -2.0 dB; 3.4 - 4.0 kHz, short loop, ZTc = 900, ZTr = 600 -0.5 to -1.5 dB; 200 - 3.4 kHz, long loop, ZTc = 900, ZTr = 600 +1.0 to -1.5 dB; 3.4 - 4.0 kHz, long loop, ZTc = 900, ZTr = 600
Delay Distortion (Voice Band) Increase	$\leq$ 200 µs; 600 - 3.2 kHz, short loop, ZTc = 900, ZTr = 600 $\leq$ 250 µs; 200 - 4.0 kHz, short loop, ZTc = 900, ZTr = 600 $\leq$ 200 µs; 600 - 3.2 kHz, long loop, ZTc = 900, ZTr = 600 $\leq$ 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
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 @ 1kHz to 53 dB @ 3.0 kHz, Bias 25 mA DC
Tip to Ring Capacitance, POTS Port	$20 \le C \le 115$ nF; $20$ - $30$ Hz (Note: T1.413 Issue 2 requires $\le 90$ nF, plans are to increase this in Issue 3 to $\le 115$ 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



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