



# NID Splitter with Test Jack and EMI Suppression

Model NID-TJ-EMI

NAME	ORDER NUMBER
NID-TJ-EMI	SA-4706-0001



## BENEFITS

- Easy clip-in installation to standard NID/SNI boxes
- Make-before-break RJ-11 connector to verify line dial tone
- Environmentally sealed for outdoor applications
- Small insertion loss in differential mode, typically less than 0.25dB
- High Common Mode Insertion Loss, typically higher than 30dB
- Secondary lightning/surge suppression

The Comtest NID-TJ-EMI is VDSL2 rated, backwards compatible to ADSL2+ and ADSL, and has the added benefit of a built in Common Mode EMI Filter. Differential signaling operates in telecommunications utilizing twisted pairs, offering increased resistance to electromagnetic noise. Resistance to electromagnetic noise is achieved only if twisted pairs are well balanced. Both Tip and Ring receive interfering signals with the same amplitude and phase. Due to the fact that twisted pairs are transferring signals in differential mode (signal on Tip minus signal on Ring), the perfect balance will result in any couple signals on tip and ring being cancelled.

In the real world, twisted pairs are not perfectly balanced. As a result, interfering signals on Tip and Ring are not the same in amplitude and phase. Coupled signals on Tip and Ring will not be cancelled. The Common Mode EMI Filter provides insertion loss of 30dB of couple signals (Electromagnetic interference signals) without adversely affecting the DSL signal (differential mode). This helps to reduce the effect of EMI on DSL signals.

## SPECIFICATIONS

<b>DIMENSIONS</b>	50.3mm(H) x 23.4mm(W) x 76.2mm(D) (1.98" x 0.92" x 3.00")
<b>OPERATING TEMPERATURE</b>	-40 to +65 °C -40 to +149 °F
<b>WEIGHT</b>	85g (0.19lbs)
<b>CONNECTION TYPES</b>	Gel-filled Insulation Displacement Connectors (22AWG to 26AWG solid conductor type) for Phone Out (three connections) and Modem Out; RJ-11 connection for Test Jack; Local Loop via twisted pair
<b>CAPACITY</b>	1 Subscriber loop per line unit
<b>COMPLIANCE</b>	T1.413, T1.424, ITU-T G.992.1, G.992.3, G.992.5, G.992.1 & G.993.2, CSA/UL 60950, FCC Part 68, CS03, GR1089 (Level 1 & 2 Surges and Power Fault), GR3167