

Communication products to depend on.<sup>™</sup>

# **PREMIER®**

## xDSL over POTS In-Line and Slim In-Line Filters

The PREMIER filters are designed to expedite the service delivery and improve the performance of digital subscriber line (DSL) services. These models filter all telephone sets, facsimile machines, answering machines, etc. individually or in groups. The DSL filters design electronically isolates the high-speed DSL data streams from the voice band POTS (plain old telephone service) equipment. This design effectively blocks the DSL, and other radio frequencies from 25 kilohertz to 30 Megahertz.



#### **Features**

- » Data Protection Isolates telephone impedance changes from DSL equipment
- » Excellent DSL band attenuation that protects voice band equipment and prevents inter-modulation distortion from degrading data rates
- » Compatible with all major DSL standards including ADSL, ADSL2+, VDSL, and VDSL2
- » Voice Protection Isolates DSL band frequencies from voice band equipment
- » Excellent longitudinal balance
- » Compatible with Caller ID, facsimile and metallic loop testing
- » RoHS compliant
- » Compliant and listed with UL 60950, FCC Part 68
- » ETL certified

### **Ordering Information**

| Item Number | Part Number  | Description                        |  |
|-------------|--------------|------------------------------------|--|
| 0000188943  | PT-DSL-ILF-T | xDSL over POTS In-Line Filter      | Includes a second convenience jack that is unfiltered for connecting DSL |
| 0000188942  | PT-DSL-ILF   | xDSL over POTS Slim In-Line Filter |  |

## PREMIER® Filter Specifications

| Line side differential input blocking imp        | edance                            |       |
|--|-----------------------------------|-------|
| At 20kHz   | >2k                               |       |
| At 30kHz   |                                   | >3k   |
| From 5MHz to 10MHz                               | >2k                               |       |
| 1kHz insertion loss between $600\Omega$ resis    | stive                             |       |
| Single filter                                    | <0.4                              |       |
| With 5 filters                                   |                                   | <0.6  |
| 1kHz/2.8kHz slope between $600\Omega$ resis      | stive                             |       |
| Single filter                                    | <0.1                              |       |
| With 5 filters                                   | <1.1                              |       |
| DC resistance in Ohms                            |                                   |       |
| Tip to Tip, and Ring to Ring                     | <12                               |       |
| Tip to Ring                                      | >10M                              |       |
| Longitudinal Balance per IEEE method             |                                   |       |
| From 200 - 1kHz                                  | >58dB                             |       |
| From 1kHz - 3kHz                                 | >53dB                             |       |
| Common mode rejection, 40kHz and 3               | >45dB                             |       |
| Low pass roll off (slope) between 6000           | >26dB                             |       |
| Inter-Modulation Distortion First and Se         | >60dB                             |       |
| Envelope Delay 300 Hz - 2800 Hz                  | <100µs                            |       |
| 600Ω Return Loss into phone side with            | 600Ω line termination with ATU-R  |       |
| Single filter                                    | SRL Low                           | >30dB |
|  | ERL                               | >14dB |
|  | SRL High                          | >17dB |
| +2 bridged filters                               | SRL Low                           | >36dB |
|  | ERL                               | >23dB |
|  | SRL High                          | >13dB |
| +4 bridged filters                               | SRL Low                           | >26dB |
|  | ERL                               | >15dB |
|  | SRL High                          | >8dB  |
| Complex* Return Loss with ATU-R                  |                                   |       |
| Single filter                                    | SRL Low                           | >27dB |
| Single filter                                    | ERL                               | >14dB |
| Single filter                                    | SRL High                          | >6dB  |
| + 2 bridged filters                              | SRL Low                           | >19dB |
|  | ERL                               | >14dB |
|  | SRL High                          | >3dB  |
| + 4 bridged filters                              | SRL Low                           | >15dB |
|  | ERL                               | >7dB  |
|  | SRL High                          | >2dB  |
| *1330 $\Omega$ in parallel with (100nfd in serie | s with 348Ω)                      |       |
| DC Loop Current - Meets specifications           | s between 20 and 100 milliamps DC |       |
| Connectors: RJ-11 Jacks and RJ-11 Pl             |                                   |       |
| Compliant and listed with UL / CSA 609           |                                   |       |

