

## VDSL Single Port Bridge Module

### “AERO”



#### Introduction

AERO is a Long Reach Ethernet (LRE) module with one Ethernet port (on 1 RJ-45 connector) and one VDSL port (on 1 RJ-11 connector). The module is a bridge mode modem accommodating well proven Ethernet and VDSL technologies to extend Ethernet over single-pair phone line by using a VDSL signal. Up to 100/60 Mbps transition bandwidth within 300m and 40/10 Mbps for 1km long range connections provide ultra-high performance to the pervasive telephone line network. With different band plan supported, we can have symmetric upstream and downstream. It has the advantages of minimum installation time (simply as plug-n-play) and minimum installation expense by allowing video streaming and data to share the same telephone line without interference. Furthermore, power over telephone line module is an option for those who have no power supply in the far end.

The Metanoia Communications LRE solution, including the CO (Central Office) site module HOPE and CPE (Customer Premise Equipment) site module AERO, delivers everything which needed to quickly deploy a high-speed IP-based network for providing high-speed Internet access, video-on demand services, and voice services. The resulting compact, cost-effective form factor offers an attractive LRE solution for system integrators, small business and building owners.

#### Features

- ◆ 1 full-duplex VDSL links via RJ-11/BNC connectors
- ◆ Selectable CO and CPE mode
- ◆ Selectable fast and interleaved mode
- ◆ Selectable target data rate
- ◆ Selectable target SNR margin
- ◆ Flexible band plan supported including 998 ISDN, 997 ISDN, symmetric ISDN
- ◆ Predefined 8 profile setting
- ◆ Compliant with ETSI, ITU and ANSI standards

#### Specifications

- ◆ Board dimension: 77mm x 110 mm
- ◆ Power supply: DC 9 Volt over 3.5mm DC jack.
- ◆ Power consumption: 4.2 Watt maximum.
- ◆ Interface:
  - RJ-11 female Phone Jack
  - RJ-45 female Ethernet jack
- ◆ WAN: Full 10/100 Ethernet support with auto MDX.
- ◆ Phone: Industry standard phone jack with on board surge protection.
- ◆ Standard: Full ITU-T G.993.1 (VDSL) and G.997.1 compatible.
- ◆ Pass EMI: FCC-B, VCCI-A
- ◆ Surge protection K21/K20 4KV
- ◆ Operation temperature : -20 – 60 C

## Performance

