

NetDSL 1700 Wireless LAN ADSL Router

Product Specifications

Version 5.2 Revision 3
Dec. 15, 2000

ARESCOM

1. SOFTWARE SPECIFICATIONS

1.1 Routing

- RIP1, RIP2, and static routing on all the LAN and WAN ports
- Support DHCP Server and Client on both the Ethernet and Wireless LAN interface – Automatic assignment and reception of IP Address, Mask, Default Gateway, and DNS servers address to workstation (RFC 2131, RFC 2132)

1.2 Bridging

- Transparent Bridging among ADSL, Ethernet and Wireless LAN
- Bridge Filters – MAC-address based
- Support up to 510 MAC learning addresses

1.3 ATM

- Support ATM cell format ITU-T I.361
- Support ATM Forum UNI 3.1/4.0 PVC
- Up to 8 AAL5 PVC (Permanent Virtual Circuit)
- UBR traffic shaping on per-PVC basis
- Traffic shaping value ranges from 64K to 640K with incremental of 64K. Default to 512K.
- OAM F5 loopback support (I.610)

1.4 WAN Protocol

- Multiple protocol over AAL5 (RFC 1483)
- Classical IP (RFC 1577)
- PPPoA: PPP over AAL5 (RFC 2364)
- PPPoE: PPP over Ethernet and Wireless LAN

Note: Users are able to log-on to ISP with PPPoE on both Wireless LAN and Ethernet environment. When the NetDSL 1700 is set in a bridge mode, a PPPoE client can be run on either a laptop PC through the wireless interface or a desktop PC through the Ethernet interface.

- PPP (RFC 1661)

1.5 Internet Access Sharing

- NAT/PAT (RFC 1631) proxy supports unlimited multi-user sharing via Ethernet LAN
- NAT (Network Address Translation) supports PAT (Port Address Translation) for server hosting (i.e. Web, FTP, Mail, etc.), multimedia applications (i.e., NetMeeting, CuSeeMe, ICQ, etc.), and Internet gaming (i.e. Quake, Diablo, StarCraft, etc.).
- NAT supports Microsoft PPTP VPN
- Auto DNS
- Support Public (registered) and Private (unregistered) IP addresses simultaneously with Static/NAT mixed mode

1.6 Security

- PAP (RFC 1334), CHAP (RFC 1994), and MS-CHAP user authentication
- Password control for Windows GUI, and Telnet port management
- IP packet filtering Firewall
- WEP (wired equivalent privacy) 40/64/128-bit encryption keys and SSID on Wireless LAN

1.7 Network Management

- Windows-based (95, 98, NT 4.0, 2000) GUI management through both Ethernet and Wireless LAN

Note: The NetDSL 1700 can be managed through the corresponding NetDSL Manager. When NetDSL Manager runs on a wireless client, after changing the NetDSL 1700 settings related to the wireless interface such as SSID and WEP Key, users need to make the client side with the same wireless settings via the provided utility software. After all changes take effective, the wireless client will be able to re-connect to the NetDSL 1700.

- Web-based management
- Command Line User Interface: Telnet access
- Windows-based remote management via pre-defined ATM PVC (VPI 1, VCI 39)
- Firmware upgrade available from TFTP, FTP, or Windows-based manager
- Configuration backup and restore using Windows-based manager
- Real time status display and event report from Windows-based manager and Syslog
- Disaster recovery (For users who forget the password to the NetDSL Manager)

Note: This feature is supported via reset. However, the reset can only be done with a password provided by ARESCOM. Users need to contact ARESCOM's Customer Support and provide the MAC information of their router. ARESCOM will then provide the corresponding password for resetting that unit with the specified MAC.

1.8 PPP Management

- The PPP attempt to the RAS (Remote Access Server) will be initialized once the ADSL line is synchronized.
- The PPP Username and Password can be saved into the NetDSL.
- Bi-directional PPP authentication is available. Default setting is receiving authentication from the RAS.

2.0 HARDWARE SPECIFICATIONS

2.1 Interface

WAN Interface

- ADSL Interface
 - One ADSL port (RJ-11)
 - ADSL Line Code: Support ANSI T1.413 Issue 2, ITU-T G.992.1 (G.DMT), and ITU-T G.992.2 (G.Lite)
- ADSL Data Rate:
 - ANSI T1.413: Up to 8 Mbps downstream and up to 1024 Kbps upstream operating at full rate connection
 - G.DMT: Up to 8 Mbps downstream and up to 1024 Kbps upstream operating at DMT full rate connection
 - G.Lite: Up to 1.5 Mbps downstream and up to 1024 Kbps upstream operating at G.lite connection

Wired LAN Interface

- One Ethernet 10BaseT (IEEE 802.3) port (RJ-45)

Wireless LAN Interface

- One built-in Wireless LAN access point

- IEEE 802.11b compliant
- Operating in the unlicensed 2.4GHz ISM band
Operation Frequency/Channels
North America/FCC: 2.412~2.462 GHz (11 channels)
Japan TELEC: 2.412~2.472 GHz (14 channels)
- Modulation Technique: Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
- Dynamic Rate Shifting: 11, 5.5, 2 and 1Mbps

Coverage Range*	11Mbps	5.5Mbps	2Mbps	1Mbps
Open Space	120 meters	195 meters	400 meters	400 meters
Semi-open Space	50 meters	60 meters	90 meters	90 meters
Closed Space	30 meters	45 meters	60 meters	60 meters

- Media Access Protocol: CSMA/CA with ACK
- Security Management: WEP (wired equivalent privacy) and user password authentication

2.2 LEDs

- One for POWER
- One for DIAG
- One for ADSL WAN: Link/Act
- One for Ethernet: Link/Act
- One for Wireless LAN: Link/Act

2.3 Mechanical

- Dimensions: 9.5 (w) x 6.5 (d) x 1.4 (h) in.
- Weight: 1.3 lbs.

2.4 Operating Environment

- Operating temperature range: 0°C to 40°C (32°F to 104°F)
- Operating humidity range: 0% to 95% non-condensing

2.5 Power (external power adapter)

- Input: 100 – 240 VAC, 47-63 Hz, 0.4A
- Output: 5VDC, 2A
- Power consumption: 8.5 watts nominal

2.6 Compliance / Regulatory

- EMI: FCC Part15 Class B & Part 15C, CE EN55022 Class B
- Immunity: CE EN50082
- Safety: EN60950

Note:

The product specifications are subject to change without prior notice.

*: The radio & noise in the office environment might have impacts on the actual coverage.