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AT-AR236E
ADSL Bridge/Router

AT-AR236E

ADSL Bridge/Router with
1 Ethernet port and 1 USB port

High Bandwidth Access to the Internet and Corporate LAN

The AT-AR236E is the perfect solution for the small office or branch office that wants to use high speed, 'always on' ADSL services to access the Internet or other corporate locations. Combining a ADSL modem, IP router and powerful Stateful Inspection Firewall into one affordable unit, the AT-AR236E provides the ideal solution for bandwidth hungry end-users and ADSL service providers who need security.

The AT-AR236E is easily installed over an existing analogue line, supporting standard voice operation together with state-of-the-art ADSL services. Applications include data intensive office use, fast web download, video-on-demand, video streaming and telecommuting via VPN.

Business-class Stateful Inspection Firewall with Intrusion Detection

Because ADSL offers an 'always on' connection, users are actually more at risk using this service than with conventional modem dial-up. To counter this threat, the AT-AR236E is equipped with a powerful Stateful Inspection Firewall that protects against malicious attacks from the Internet – giving peace of mind security for the home and office LAN.

In addition, a built-in 'Intrusion Detection System' protects against a wide range of Denial of Service attacks. Network Address Translation (NAT) also 'hides' all LAN users behind one public IP address, protecting the LAN from external hackers. The AT-AR236E's advanced NAT operation also supports comprehensive protocol and port mapping for extensive application

support. Virtual Private Network (VPN) operation is transparently supported using IPSec, PPTP and L2TP pass-through, for teleworker applications.

IPSec, PPTP and L2TP Pass-through for Secure VPN Operation

Transparent pass-through for Microsoft's Point-to-Point Tunnelling Protocol (PPTP), Layer 2 Tunnelling Protocol (L2TP) and Internet Protocol Security (IPSec) allows organisations to extend their corporate network to remote users and branch offices, by building a VPN across the Internet using secure 'tunnels'. This eliminates the cost of long distance dial-ups and the need for Remote Access Server (RAS) equipment.

The Service Provider's Choice

The AT-AR236E is ADSL2 and ADSL2+ compliant, supporting up to 12Mbps and 24Mbps downstream data rates respectively. Using industry-standard Discrete Multi-Tone (DMT) technology, the AT-AR236E supports network speeds up to 8Mbps downstream and up to 1Mbps upstream. Alternatively, G.lite is supported for applications where minimum cost and tool-free installation is required. Close partnering with Digital Subscriber Line Access Multiplexer (DSLAM) vendors ensures the highest levels of interoperability for service providers, with extensive ADSL testing being carried out. Built-in support for PPP over Ethernet (PPPoE) and PPP over ATM (PPPoA) provides full compatibility with existing ISP dial-up systems. Bridged Ethernet and IP over ATM complete the range of flexible and robust network connectivity options. Superior rate/reach performance ensures that service providers and users alike enjoy maximum data throughput at maximum line-lengths from the exchange.

Key Features

- Supports RE-ADSL2/2+, ADSL2/2+, G.dmt.bis, G.lite.bis, G.dmt and G.lite ADSL standards, Annex A or B

- Supports ADSL standards Annex L and Annex M

- Up to 24Mbps downstream, and up to 3.5Mbps upstream data rate

- 1 x ADSL/2/2+ port

- 1 x USB port

- 1 x 10/100 Ethernet port

- Network Address Translation (NAT)

- Integral Stateful Inspection Firewall

- Integral Intrusion Detection System

- IPSec, PPTP and L2TP VPN pass-through

- Dynamic port opening for gaming applications

- Browser-based GUI

- PAP/CHAP/MS-CHAP authentication

- Dynamic IP address assignment

- Static IP address assignment

- Dynamic Host Configuration Protocol (DHCP) server/relay/client

- SNMP v1 and v2c

- Compact form factor

- Flash upgradeable

Flash Software Update

The AT-AR236E can be upgraded simply and quickly by loading new firmware into flash memory using the simple, browser-based application. New enhancements can be loaded into the unit in a matter of minutes.

Easy to Set Up

Installation takes a matter of minutes using the simple, browser-based configuration interface. Standard cabling is used to connect to the Ethernet LAN and ADSL. All cables, including USB, are supplied with the product. All TCP/IP Operating Systems are supported, including Windows, Linux and Mac. An integral DHCP server provides automatic IP address assignment to all PCs on the LAN, while both static and dynamic IP address assignment from the ISP are supported. The AT-AR236E is ideal for 'wires only', self-install services.

Main Features
ADSL/ATM Support

ANSI T1.413-1998 Issue 2, ITU-T G.992.1 (G.dmt), G.992.2 (G.lite), G.992.3 (G.dmt.bis), G.992.4 (G.lite.bis), G.992.5 (ADSL2+), G.992.3/4 Annex L (RE-ADSL2), G.992.5 Annex L (RE-ADSL2+) and G.992.5 Annex M compliant
Rate Adaptive modem at 32Kbps steps
Dynamic Adaptive Equalisation to improve carrier's service area
Bridge Tap Mitigation
ATM Layer with traffic shaping QoS (UBR, CBR, VBR-rt, VBR-nrt)
AAL ATM attributes — AAL5
Multiple PVC up to 8 (bridged)
Spectral compatibility with POTS
F5 OAM loopback/send and receive

Encapsulation Support

RFC 2684 Bridge and Routed LLC and VC Mux
RFC 2364 PPPoA Client
RFC 2516 PPPoE Client
RFC 2225/1577 Classical IP
Transparent Bridge
PAP/CHAP/MS-CHAP for Password Authentication

Network Support

Static IP, Dynamic RIP routing
IP/TCP/UDP/ICMP/ARP/RARP application
Network Address Translation (NAT)
Port mapping/forwarding
Easy setup of port forwarding rules for popular games/applications
NAT Application Level Gateway for popular applications
DHCP server/relay/client
DNS relay agent
DMZ
IPSec and PPTP/L2TP VPN pass-through
PPP always on with configurable timeout
PPP Dial on Demand
Universal Plug and Play (UPnP)

Management Support

Web based HTTP management GUI
Web based firmware upgrade (local)
Soft Factory Reset Button via web GUI
Diagnostic test (DSL, OAM, Network, Ping)
Telnet/CLI (Read Only)
Syslog
Firmware upgradeable for future feature enhancement

Security Support

NAT for basic firewall
Packet Filtering firewall
Stateful Packet Inspection
Protection against Denial of Service attacks
Password Authentication to modem

Hardware

Texas Instrument TNETD7300 Single Chip Network Processor/AFE/Line Driver Chipset
2MB Flash ROM
8MB SDRAM
Dying Gasp
ITU K.21

Platform Support

OS independent for Ethernet
Windows 98SE/2000/Me/XP/2003 for USB

Power Requirements

Input Voltage: 9vDC +/- 10%
Input Current: 1.0A

Physical Specifications
LED Indicators

1 x PPP
1 x Power
1 x DSL
1 x Ethernet/Activity
1 x USB

External Connectors

1 x ADSL/2/2+ port (RJ-11)
1 x USB 1.1 port (Type B)
1 x Ethernet 10/100 port (RJ-45; auto MDI/MDI-X)
1 x Reset button (restore to factory defaults)
1 x DC power jack (9V)

Measurements

Dimension: 144(L) x 109(W) x 30(H) mm
Weight: Approx. 250g

Environmental Characteristics

Operating temperature: 0°C to 40°C
Non-operating temperature: -25°C to 70°C
Operating humidity: 30% to 80% Relative Humidity (Non-Condensing)
Non-operating humidity: 30% to 95% Relative Humidity (Non-Condensing)

Ordering Information

AT-AR236E-xx
ADSL Bridge/Router, Annex A
(1 Ethernet 10/100 port, 1 USB port)

AT-AR236E(B)-xx
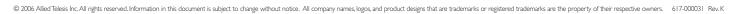ADSL Bridge/Router, Annex B
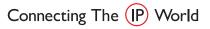(1 Ethernet 10/100 port, 1 USB port)

Where xx =   10 for US power adaptor
                    30 for UK power adaptor
                    40 for Australian power adaptor
                    50 for European power adaptor

Connecting The (IP) World

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