AT-AR255E ADSL Annex B Router

AT-AR255E, ADSL Bridge/Router with integral 4 x 10/100Mbps switch for Annex B networks

KEY FEATURES

High Speed ADSL connectivity With integral 4-port switch

Annex B, UR2 compatible

Up to 8Mbps downstream, And up to 1Mpbs upstream

1 x ADSL,G.DMT & G.Lite

4 x 10/100TX Ethernet

Network Address Translation (NAT)

Integral Stateful Inspection Firewall

Integral Intrusion Detection System

Dynamic port opening for Gaming applications

Browser-based GUI

Global IP address pool on ADSL WAN port

PAP/CHAP Authentication

Dynamic IP address Assignment

Static IP address assignment

Dynamic Host Configuration Protocol (DHCP) server & relay

IP Multihoming

SNMP V1

Compact form factor

Includes 1 year Net.Cover® Basic Plus service plan

Flash upgradeable

Annex B - Only for use where ADSL is delivered over an ISDN line - for example Germany, some lines in Sweden, Norway, Belgium, Netherlands and Luxembourg

HIGH-BANDWIDTH ACCESS TO THE INTERNET AND CORPORATE LAN

The Allied Telesyn AT-AR255E 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 an ADSL modem, IP Router, 4-port 10/100TX switch and Stateful Inspection Firewall into one affordable unit, the AT-AR255E provides the ideal solution for bandwidth-hungry end-users and ADSL service providers - who need security. The AT-AR255E is easily installed over an existing ISDN line, supporting standard ISDN 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. Virtual Private Network (VPN) operation is also supported using PPTP and IPsec passthrough.

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-AR255E is equipped with a powerful Stateful Inspection Firewall that protects from 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 including Smurf attacks, Netbus scans, Fin attacks, FRAG attacks and IP Spoofing. Network Address Translation (NAT) also 'hides' all LAN users behind one public IP address, protecting the LAN from external hackers.

ANNEX B SUPPORT

The AT-AR255E ADSL Router supports Annex B networks as used in Germany (U-R2,T-DSL), Spain and a number of other European countries. Annex B supports the operation of ADSL over Euro-ISDN services, it is a popular solution in territories where there is a high installed base of ISDN circuits.

THE SERVICE PROVIDER'S CHOICE

Using industry-standard Discrete Multi-Tone technology (DMT), the AT-AR255E 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. 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.

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 line. All cables are supplied with the product. All TCP/IP operating systems are supported including Windows 95/98/ME/2000/NT, Unix and MAC. An integral DHCP server provides automatic IP address assignment to PC's on the LAN, while both static and dynamic IP address assignment from the ISP is supported.

UP TO 253 LAN USERS CAN SHARE ONE LINE AND ONE IP ADDRESS

The ADSL Router supports up to 253 LAN-attached users—easily enough for a small office, while high speed ADSL services mean that they can all share a single line and still have plenty of performance. Network Address Translation (NAT) allows 253 users to share one Internet IP address for low-cost Internet access.

INTELLIGENT ADSL RATE ADAPTION

The upstream and downstream data rates are dynamically allocated by the AT-AR255E to minimise noise and maximise service reliability. For each session, the ADSL line speed is automatically reconfigured to achieve maximum data throughput.

FLASH SOFTWARE UPDATE

The AT-AR255E can be upgraded simply and quickly by loading new firmware into Flash memory using a Windows based TFTP application, new enhancements can be loaded into the unit in a matter of seconds.

ABOUT ALLIED TELESYN

Allied Telesyn leads the world in network technologies for the access edge. Since the company's inception in 1987, Allied Telesyn has been developing IP-based network products for use in video, voice and data networks at the metro edge, in education, government agencies and across the enterprise. Allied Telesyn's access, aggregation and core transport technologies range from simple Ethernet adapters, hubs and media converters to robust multi-layer Gigabit Ethernet switches and routers, wireless systems, DTM and WDM transport solutions for delivering real-time voice, video and data. Allied Telesyn's comprehensive support and professional service programs are suited to meet the growing demands of today's switched broadband infrastructures.

SERVICE & SUPPORT

Allied Telesyn provides value-added support services for its customers under its Net.Cover℠ programs. For more information on Net.Cover℠ support programs available in your area, contact your Allied Telesyn sales representative or visit our website.
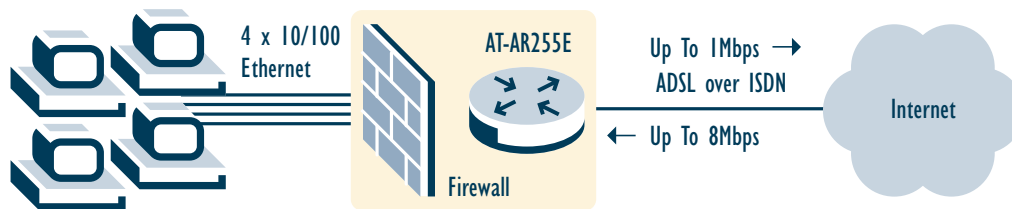
www.alliedtelesyn.com

ROUTERS

Allied Telesyn

BRANCH OFFICE TO CORPORATE OFFICE CONNECTIVITY

4 x 10/100 Ethernet — AT-AR255E — Up To 1Mbps → ADSL over ISDN ← Up To 8Mbps — Internet — Firewall

In the diagram above, the Ethernet users share a single high speed ADSL link (over ISDN) to the Internet. They are also protected by a powerful Stateful Inspection Firewall which protects LAN users from malicious attack.

ADSL LINE

G.DMT (G992.1) & G.Lite (G.992.2)
Annex B (incl. U-R2)
DSL Forum WT-062v9 compliant
Connector: RJ-11
Downstream data rate: 32kbps to 8Mbps
Upstream data rate: 32kbps to 1Mbps, Rate Adaptive
4 PVC's over AAL5
UBR/CBR/VBR-nrt/VBR-rt traffic shaping
VPI Range (0-4095) and VCI range (1-65535)
UNI 3.0, 3.1 and UNI 4.0 ATM Signalling (support for SVCS)
F4/F5 OAM Loopback/Send for AIS, RDI, CC, PM parameters as per 1.610 specification
Trellis Coding support
User Configurable ADC/DAC Ratio and Gain Table Parameters
DSL Forum Auto-Configuration TR-037 Upgradeable
ILMI 4.0 Support Upgradeable

MANAGEMENT SUPPORT

Browser-based GUI
HTTP Firmware Upgrade Support
Remote management through HTTP/XML
Web Based Diagnostic Test Utility for Fault Isolation
SNTP Support
SNMP V1 Support
Firmware upgrade for feature enhancement

PHYSICAL INTERFACES

AT-AR255E

ADSL Bridge/Router	4 x 10/100 Eth. port (RJ45), MDI-X
	1 x ADSL port (RJ-11)
	1 x Reset button
	Power
Status	LEDs Power, Status, Alarm, Activity

POWER/PHYSICAL CHARACTERISTICS

External	5V DC, 0.4A, 2W
Dimensions (H/W/D)	40mm x 170mm x 115mm
Weight	300g

ENVIRONMENTAL CHARACTERISTICS

Operating Temp.	0°C to 45°C
Storage Temp.	-25°C to 70°C
Relative Humidity	10% to 90% (Non-condensing)

STANDARDS AND COMPLIANCE

RFC 1483 Encapsulation (IP, Bridging & encapsulated routing)
RFC 2364 PPP over ATM (LLC & VC multiplexing)
RFC 1577 Classical IP
RFC 2516 PPPoE
RFC 2131 DHCP Server
RFC 1334 PAP
RFC 1541 DNS
RFC 791 IP
RFC 793 TCP
RFC 1631 NAT
RFC 1994 CHAP
RFC 1144 TCP/IP

ELECTRICAL/MECHANICAL APPROVALS

CE
EN 60950 (Safety Europe)
FCC Part 15 Class B, Part 68 (Emissions)
UL 1950 (Safety US)
EN55022 Class B (Immunity)
CSA 950/US

FEATURE SUMMARY

PPP and IP Routing
Supports Annex B - ADSL over EURO-ISDN
Stateful Inspection Firewall
Intrusion Detection System
Network Address Translation (NAT)
NAT Application Level Gateway for Gaming applications, Real Audio/Video applications
DHCP Server/Relay/Client Agent
DNS Relay Agent (Primary and Secondary)
PPP-IPCP Primary DNS Server Discovery
Single and Multiple IPSec, PPTP, L2TP VPN pass through
Dynamic IP Address Assignment
DNS Proxy
RIP V2
PAP/CHAP
Static IP Address Assignment
Browser Based GUI
Flash Upgrade

USA Headquarters: 19800 North Creek Pkwy, Suite 200, Bothell, WA 98011, USA Tel: 800.424.4284 Fax: 425.481.3895
European Headquarters: Via Motta 24, 6830 Chiasso, Switzerland (Corporate) Tel: (+41) 91 697.69.00 Fax: (+41) 91 697.69.11
(European Sales) Tel: (+39) 02 414.112.1 Fax: (+39) 02 414.112.61

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