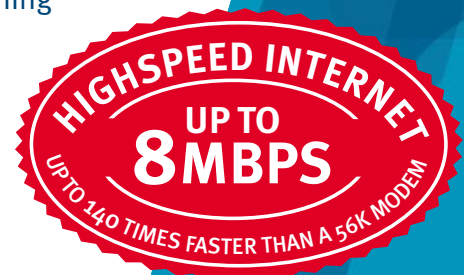# Dynalink

Secure ADSL Modem / Router

Ethernet & USB Interfaces & Security Firewall Features

RTA220

- New generation chipset
- Stateful packet inspection (SPI) firewall
- VPN passthrough
- Online all the time - no waiting for dialup
- Browse the Internet and talk on the phone at the same time
- Highspeed online gaming
- Streaming Video
- Freecall Helpline
- 12 Month Warranty

HIGHSPEED INTERNET
UP TO
8MBPS
UPTO 140 TIMES FASTER THAN A 56K MODEM

Highspeed internet now

Dynalink

Leaders in ADSL

Product Overview

1 Introduction:

The RTA220 is a new generation secure dual interface ADSL Modem Router. It enables the use of a telephone line for both regular voice calls and high-speed Internet or corporate LAN access at the same time. Sharing high speed Internet access is made easy by connecting the modem/ router via a high-speed 10/100Mbps auto-sensing Ethernet port to your LAN or computer. This is independent of the operating system and does not require loading any drivers. A USB 1.1 compliant port is also available for connecting to a stand-alone computer with Windows 98, ME, 2000 or XP.

1.1 SECURITY

Integrated security features of the RTA220 include a powerful stateful inspection firewall and intrusion protection functions. These combine to provide robust access control and prevent unauthorised access to sensitive data on your computer or network. The RTA220 comes with convenient pre-set levels of security. Inexperienced users can choose a suitable level of firewall protection without having to learn how firewall policies are made. Expert users may define their firewall rules, or apply filters to ports according to source or destination IP address, or protocol. Hosting of web services is made easier with the support of DMZ (exposed) host.

1.2 UNIVERSAL PLUG AND PLAY

Universal Plug and Play (UPnP™) support guarantees interoperability with other UPnP-enabled network computers and information appliances without the need for complicated configuration.

1.3 VPN AND MORE

Other features include support of VPN passthrough for PPTP and IPSec ESP single tunnel mode.

Router configurations can be saved to disk and restored when required.

The RTA220 features the Globespan GS7070 ADSL modem chipset and Virata Helium™ 210-80 processor. The Helium processor runs the complete suite of GlobespanVirata networking software based on Virata's ISOS™ 8.1 development platform. Future upgrades are made possible with the use of flash memory.
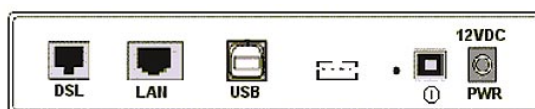
2 Hardware Specifications

2.1 Power requirement

- 12 VDC 1A via the supplied switching AC-DC adapter.
- Maximum power consumption is less than 10 W.

2.2 PHYSICAL INTERFACES

NAME	LABEL	DESCRIPTION
Power Port	PWR	Connect to 12VDC 1A power source
Power Switch		Power switch for ADSL Modem/Router
Reset Button		Push in for several seconds to reset to factory default
Console Port		Proprietary 4-pin console port connector for development work.
USB Port	USB	Connect to USB port of computer. Comply with USB 1.1 specifications.
10/100 Mbps LAN RJ45 Connector	LAN	Connect to computer with a straight cable; Connect to Hub with a crossover configuration or with a crossover cable. The Ethernet interface is itself 10/100Mbps and compatible with 10/100Mbps device. Complies with IEEE 802.3 and IEEE802.3u.
ADSL Port RJ11 Connector	DSL	Connect to ADSL network.

2.3 FRONT PANEL LED INDICATORS
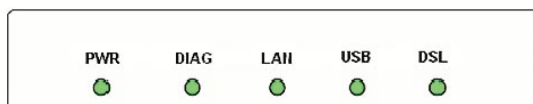
LED	DESCRIPTION
PWR	Power indicator, ON when power is provided.
DIAG	During power on, LED should ON then DIAG should go off. If LED always ON, a hardware problem is indicated.
LAN	ON when Ethernet is connected. Blinking when Ethernet is transmitting/receiving data.
USB	ON when USB is connected. Blinking when USB is transmitting/receiving data.
DSL	ON when ADSL link is established. Blinking when data are going through.

2.4 ADSL

- Compliance to ANSI T1.413 Issue 2, ITU G.992.1 Annex A (G.dmt), ITU G.992.2 Annex A (G.lite), ITU G.994.1 (G.hs)

- G.DMT data rate: Downstream up to 8 Mbps, Upstream up to 832 kbps

- Auto-negotiation for rate adaptation in steps of 32 kbps

- Dual latency, supports fast and interleaved modes

- Supports Overhead Framing defined in G.992.1, G.992.2, G.997.1

- In case of power failure, router is able to restart and will operate automatically after the input power is restored

2.5 PRODUCT CABINET

- Desktop package dimensions are: 159mm(L) x 122mm(W) x 41.5mm(H)

- Weight 280g

2.6 ENVIRONMENTAL

- Operating temperature: 0~45C

- Non operating storage temperature: -10~85C

- Relative humidity: 20%~90% (non-condensed)

2.7 COMPLIANCE/REGULATORY

- Telecom New Zealand Telepermit PTC 272/02/027

- Australian Communications Authority A-Tick, C-Tick

- CE

2.8 PRODUCT PACKING

- 1pc switching power adapter output 12 VDC 1A

- 1pc Ethernet cable

- 1pc USB cable

- 1pc telephone cord

- 1pc CD-ROM including User Manual and drivers for USB installation

- 1pc printed Quick Set-Up Guide

- 1pc ADSL in-line microfilter

2.9 System Requirements

- ADSL service enabled on telephone line

- Valid ADSL internet access account

- Web browser such as Internet Explorer 5.0 or later, for system configuration

For connection via Ethernet:

- Computer with Ethernet connection (10/100 Base-T), OR

- Ethernet hub/switch, if connecting the device to more than one computer

- Operating system: Windows 95, Windows 98, Windows 98 SE, Windows ME, Windows NT4.0, Windows 2000, Windows XP, Macintosh, Unix or Linux

For connection via USB:

- Available USB port

- Operating system: Windows 98, Windows 98 SE, Windows ME, Windows 2000, Windows XP
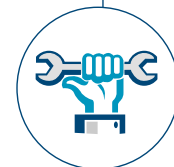
3 Software Features:

3.1 ATM

- Compliant to ATM Forum UNI 3.1 / 4.0 Permanent Virtual Circuits (PVCs)
- Support up to 8 AAL5 Virtual Circuit Channels (VCCs) for UBR, CBR, VBR-rt, and VBR-nrt with traffic shaping
- RFC1483 (RFC2684) LLC Encapsulation and VC Multiplexing over AAL5
- RFC2364 Point-to-Point Protocol (PPP) over AAL5
- RFC2225 Classical IP and ARP over ATM
- RFC2516 PPP over Ethernet: support Relay (Transparent Forwarding) and Client functions
- OAM F4/F5 End-to-End/Segment Loopback Cells

3.2 BRIDGING FEATURES

- Supports self-learning bridge specified in IEEE 802.1D Transparent Bridging
- Supports up to 4000 learning MAC addresses
- Transparent Bridging between 10/100 Mb Ethernet and USB

3.3 ROUTING FEATURES

- UPnP IGD (Internet Gateway Device) with NAT traversal capability support
- NAT (Network Address Translation) / PAT (Port Address Translation) allow multiple users on the LAN to access the internet for the cost of only one IP address.
- Built in ALGs (Application Level Gateways) such as NetMeeting, FTP, Quick Time, mIRC, Real Player, CuSeeMe.
- Multiple Virtual Servers (eg., Web, FTP, Mail servers) can be setup on user's local network.
- VPN passthrough for PPTP and IPSec ESP tunnel mode.
- Static routing RFC1058 RIPv1 and RFC1723 RIPv2.
- DNS Relay and DNS Server
- ARP Proxy

3.4 SECURITY FEATURES

- PAP (RFC1334), CHAP (RFC1994) for PPP session
- Stateful inspection firewall support IP packets filtering based on source/destination IP address, port number and protocol type.
- Intrusion detection provides protection from attacks such as SYN/FIN/RST Flood, Smurf, WinNuke, Echo Scan, Xmas Tree Scan.
- DMZ support

3.5 CONFIGURATION AND MANAGEMENT

- User-friendly embedded web configuration interface with password protection
- Remote management access control
- Telnet session for local or remote management
- HTTP firmware upgrades via web browser GUI directly
- Configuration settings can be saved to disk or restored from disk
- Recovery image back up. Should the normal run-time image become damaged, the system uses the stored recovery image to boot up.
- Distribute IP addresses to end users via DHCP server provided by ADSL router
- SNMPv1/v2 agent with MIB-II, PPP MIB, ADSL Line MIB