## Dynalink ADSL Modem/Router



Ethernet Broadband Bridge/Router/Modem

RTA100+

- Online all the time no waiting for dialup
- Browse the Internet and talk on the phone at the same time
- No cable Installation
- Streaming Video
- Highspeed online gaming
- Second Helpline
- 📀 12 Month Warranty







Leaders in ADSL

## **Technical Specifications**



### **Product Overview:**

The RTA100 is an ADSL bridge/modem/router, which enables use of a PSTN line for both regular voice calls and high-speed Internet or corporate LAN access at the same time. It supports DMT full-rate and G.lite ADSL connection. The router links small to medium sized remote Ethernet LAN and includes full-featured bridging capabilities. The RTA100+ features the GlobespanVirata, Inc<sup>®</sup> chipset: GS8120-174-008D (CPU+DMT), GS3780-174-001Z (AFE) & 16M flash memory for future upgrade. The RTA100+ also features dual 10/100 Base-T Ethernet and USB 1.1 interfaces.

# 2

## Hardware Specifications:

#### 2.1 POWER REQUIREMENT

AC adapter Input 230Vac, 50 Hz; Output 16VAC/1A or 18VAC/600mA. Maximum power consumption is less than 10 Watts.

#### 2.2 PHYSICAL INTERFACE

NAME	LABEL	DESCRIPTION
Power switch		Power switch for ADSL router.
Power port	PWR	Connect to 16VAC/1A or 18VAC/600mA adapter.
Reset Button		Push to reset to factory default.
Console port	CONSOLE	Provides 4pin DIN connections to system device for status configuration.
10/100 Bt LANRJ45 Connector	LAN	Connect to PC with a straight cable; Connect to Hub with a crossover configuration or with a crossover cable. The Ethernet interface is itself 10/100 Mbps and compatible with 10/100 Mbps device. Comply with IEEE 802.3 and IEEE802.3u.
USB port (Type B)	USB	Connects to the USB port on your PC.
ADSL port RJ11 Connector	DSL	Provides connection to ADSL network.



#### 2.3 FRONT PANEL LED INDICATORS

LED	COLOUR	DESCRIPTION	
PWR	Green	Power indicator, ON when power is provided.	
DIAG	Green	During power on, LED should ON then DIAG should go off. If LED always ON, there would be a hardware problem.	
LAN	Green	ON when Ethernet device is connected. Blinking when Ethernet is transmitting/receiving packets.	
ACT	Green	Off when no activity on ADSL line. Blinking when ADSL is transmitting/receiving data.	
DSL	Green	Off when no call in progress. Blinking when ADSL is under Training. ON when ADSL links established.	
USB	Green	ON when USB link is established. Off: No USB link.	

#### 2.4 WAN ADSL LINE

- Compliance: ANSI T1.413 issue 2, ITU-T G.DMT (G.992.1), G.lite (G.992.2)
- Auto-negotiation for rate adaptation according to central office DSLAM setting in steps of 32 Kbps
- Dual latency mode: Supports Fast and interleaved mode operation and manually configured.
- Supports Overhead Framing, EOC, AOC defined in G.992.1, G.992.2, G.997.1
- G.DMT data rate: Downstream 64oKbps 8Mbps, Upstream 64Kbps – 1Mbps
- In case of power failure, ATU-R is able to restart and will operate automatically after the input power is restored.

#### 2.5 PRODUCT CABINET

- Desktop package dimensions are 16cm x 11.5cm x 4.3cm.
- Weighs less than 400g.

#### 2.6 ENVIRONMENTAL

- Operating temperature: o~4oC
- Non operating storage temperature: -10~85C
- Relative humidity: 20%~90% (non-condensed)

#### 2.7 COMPLIANCE/REGULATORY

- CE certificate.
- ACA approval.
- Telstra approval.
- MTBF: 80000 Hrs.

#### 2.8 PRODUCT PACKING

- Power adapter Input 230V ac, 50/60 Hz; Output 16VAC/1A or 18VAC/600mA.
- 1pc Ethernet cable.
- 1pc USB cable.
- 1pc RJ11 cable.
- 1pc CD-ROM including User Manual and Quick Install Guide.
- 1pc ADSL in-line microfilter.

#### 2.9 SYSTEM REQUIREMENTS

- ADSL service enabled on telephone line.
- Valid ADSL Internet Access Account.
- Computer with Ethernet connection (10/100 Mbps) port or USB port, OR Ethernet hub/switch, if connecting the device to more than one computer.
- Web browser such as Internet Explorer 5.0 or later, for system configuration.
- Operating system: Windows 95, Windows 98, Windows 98 SE, Windows 2000, Windows ME, Windows NT 4.0, Windows XP, Macintosh, Unix or Linux.





### Software Features:

#### 1 ATM SUBSYSTEM

The ATM subsystem performs all ATM layer processing, as follows:

- Supports up to 8 ,Virtual Channel Connections (VCCs)
- Supports UBR, rt-VBR, nrt-VBR,CBR, and GFR service classes
- Provides ATM layer functionality (per 1.361)
- Provides adaptation layer (AAL5) functionality (per 1.363.5)
- Performs the traffic shaping and scheduling per ATM port
- Supports PPP over ATM (PPPoA) and PPP over Ethernet (PPPoE)
- ADSL-aware CAC
- Support for F/4F5 AIS, RDI, and loopback cells

#### 3.2 ADSL SUBSYSTEM

The ADSL subsystem handles all the physical aspects of the ADSL, including line coding, error correction, and interfacing with the 2- or 4-wire local loop. The ADSL subsystem includes the following features:

- Uses only single latency (default is interleave)
- Supports line coding types: DMT: T1.413, G.992,1, G992.2 with auto-detection

#### 3.3 DATA SUBSYSTEM

The data subsystem provides support for multiple users/hosts from a single Ethernet port. The data subsystem supports the following protocols:

- IP layer
- User Datagram Protocol (UDP)
- Transmission Control Protocol (TCP)
- Address Resolution Protocol (ARP)
- Reverse Address Resolution Protocol (RARP)
- Internet Control Message Protocol (ICMP)
- Internet Group Management Protocol (IGMP)

#### 3.4 DATA SUBSYSTEM BRIDGE PACKAGE

The package for bridge designs offers the following features:

- Up to 1000 hosts
- Supports transparent bridging as specified in IEEE 802.1d
- Supports bridged PDU encapsulation (per RFC 2684)
- MAC-level filter to accept/deny packets based on rules applicable at MAC level
- Supports bridged (per RFC 1483)

#### 3.5 ROUTING PACKAGE

Besides the bridging functions listed in the previous section, the package for router designs provides these features:

#### 3.5.1

#### Network Address Translation (NAT) & Port Address Translation (PAT)

- Provides up to 1024 NAT translation sessions
- Supports most major applications including: FTP, SNMP, ICMP, H.323, SIP, L2TP, PPTP, IPSec Quake, MIRC, ICQ, CUSeeMe.

#### 3.5.2

#### IP filtering and raw filtering

#### 3.5.3

#### Dynamic IP address allocation is supported through:

- Dynamic Host Configuration Protocol (DHCP) (per RFC 1541)
- Internet Protocol Configuration Protocol (IPCP) (per RFC 1332)

#### 3.5.4

#### Point-to-Point Protocol (PPP)

- PPP over ATM (only single-link PPP per VC)RFC 2364
- PPP over Ethernet encapsulation over the virtual interface (per RFC 2516)
- PAP or CHAP for user authentication
- Routing information Protocol (RIP) vl and v2

#### 3.5.5

#### Supported Client/Server Applications

- TFTP (Trivial File Transfer Protocol) client/server
- DHCP client, server & relay
- Telnet server
- HTTP server
- FTP server
- DNS proxy & relay

#### 3.6 NETWORK MANAGEMENT

The management interface includes the following.

- DSL Forum TR37-compliant auto configuration
- SNMP vl over DSL or Ethernet for access to the MIB-II (router only):
- CLI (Command Line Interface) via Telnet over Ethernet or DSL for a user-name & password authentication
- Web-based Graphical User Interface (GUI) enabling end-user device configuration via web browser
- Update of patch image or configuration data over TFTP/FTP/HTTP.