

## 6000 Series ADSL Routers

### Business Grade ADSL Routers for Managed Branch Office Networks



Cost-effective business grade ADSL routers for:

- Enterprise branch offices
- Retail applications
- Small offices
- Teleworkers

#### Overview

The Virtual Access 6000 Series is a cost-effective family of routers for managed ADSL voice and data services to corporate home office, retail and small branch office environments.

Designed for business grade voice, data and converged services to small offices, the routers provide secure WAN connectivity for Internet, private networking and IPSec VPN environments.

Ease of deployment, configuration management and remote support are key features of the 6000 Series, which enable service providers to deliver competitively priced managed network services to businesses.

#### Standard and Light Model Variants

The GW6000 models offer full unrestricted functionality whilst the GL6000 models offer a cost-effective alternative for smaller user environments requiring no more than 5 concurrent data and 5 concurrent VoIP users.

#### Advanced Security

6000 Series routers deliver business grade security services including:

- Stateful Inspection Firewall
- Intrusion Reporting
- Content Filtering
- High Speed IP Security (IPSec) Triple Data Encrypted (3DES) encryption for data privacy over the Internet.

#### Four Port 10/100 Managed Switch

The four port 10/100 managed switch enables multiple devices to be connected in small office environments with the ability to segment into individually filtered subnets or DMZs. VLAN segmentation offers further versatility for diverse network applications.

#### Secondary (PSTN) Interface

An internal PSTN dial modem option is also available for any of the 6000 Series models. This interface is particularly useful for out-of-band management in managed ADSL service applications.

#### Quality of Service

The 6000 Series router supports DiffServ classification, including marking, queuing, and policing functions. It supports a range of selection criteria for identifying and prioritising packets across local and remote interfaces.

The DiffServ capabilities enable the appliance to be compatible with managed MPLS network applications providing end-to-end quality of service.

#### Automated Router Provisioning

As with all Virtual Access routers, the 6000 Series offers simplicity when it comes to service provisioning. Using either the IP-Select or IP-Touch service management models from Virtual Access, the task of physical router configuration is minimised.

Router profiles are configured centrally enabling plug and play installation at the customer site. This 'Zero touch' process offers service providers considerable business benefits in large scale router deployments.

#### Centralised Router Monitoring

The 6000 Series monitor connection status and produce historical service utilisation reports.

Using a range of statistical methods, the router locally monitors a broad range of service attributes such as data throughput, ADSL line history, voice quality (MOS) and WAN utilisation.

The Virtual Access Monitor utility is a secure portal that works in conjunction with each router installed at the edge of a customer's network. Monitor provides centralised access to appliance diagnostic and network availability status.

Access to Monitor is provided to IP-Touch and IP-Select service partners and can be extended to their end-customers. Monitor allows a service provider customer's support team to proactively monitor their customer's network.

## Software Features

### Management

- Fast Start web wizard for ease of configuration
- Local and remote advanced configuration through embedded web server and Java applets
- Customisable embedded web interface
- TFTP client download/upload
- Configuration change log
- V.92 dial modem for out-of-band management
- SNMP agent
- Non-volatile battery-backed RAM log storage
- Telnet server
- RADIUS management user authentication

### ADSL Encapsulation Modes

- G.992.1 & G.992.2 Annex A and M
- G.992.2 G.lite
- G.992.3 ADSL2
- G.992.5 ADSL2+ Annex A and M
- PPP over ATM routing (RFC2364)
- PPPoE over ATM routing (RFC1483)
- MAC-level bridging (RFC1483)
- LLC encapsulation
- VC multiplexing
- Annex M supports high upload speeds
- Conforms to BT Access Network Frequency Plan for both ADSL Annex A and Annex M

### Quality of Service

- QoS support of classification and marking
- Full DiffServ support

### Fault Investigation and Reporting

- Graphical ADSL status monitor
- Graphical DSL connection monitor
- Graphical DSL connection history applet
- Event logging
- Full web-based protocol-level trace and debug
- Syslog support
- Email event alerting
- Trace route
- Ping (single/continuous)

### Service Features

- Configurable host traffic monitoring applet
- DHCP server/client
- DHCP relay
- DNS proxy
- Cisco Discovery Protocol (CDP) auto-VLAN support
- Port forwarding
- Packet filtering and firewalling
- Performance Monitor

### Routing Features

- Support for IP, TCP, UDP, ICMP, ESP, AH
- Static and dynamic IP routing algorithms
- eBGPv4
- OSPF
- RIP and RIPv2
- PPP
- Virtual Router Redundancy Protocol (VRRP)
- PAP/CHAP security
- Loopback interfaces
- Network time protocol
- Async Over TCP/IP
- SNMP MIB II

### Web Content Filtering

- IFP client uses McAfee/Secure Computing Smart Filter or Webwasher server

### VoIP Support

- SIP Proxy
- Call admission control
- MOS VoIP call quality measurement

### IPSec

- Hardware security engine for high performance encryption and authentication
- Manual and automatic key management
- HMAC-MD5-96 and HMAC-SHA-1-96
- 3DES (168bit)

### IKE-related VPN Specification

- Main mode, aggressive mode and quick mode
- Authentication using RSA signatures, DSS signatures and pre-shared keys interworking

## Hardware Features

### ADSL Interface

- RJ11 socket

### LAN Interfaces

- Four 10/100 base-T Ethernet ports
- Auto detects full- or half-duplex operation
- Auto detects a regular or crossover cable for easy connection to a switch or hub

### VLAN Support

- Tag-based 802.1Q VLAN or port-based VLAN on 4 ports

### Dial Modem Interface (Optional)

- V.92 support up to 56Kbps
- Caller ID can answer calls from known diallers only

### Approvals and Certificates

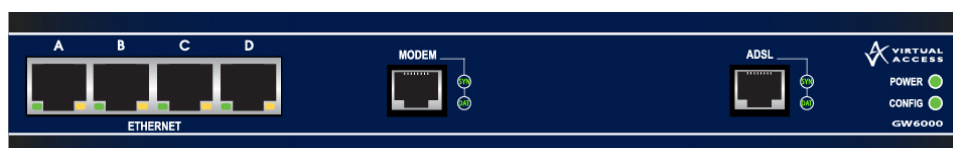
- EN60950 safety approval
- EN55022 and EN55024 EMC

### Power

- 100V-240V AC, 5 Watts
- 5V DC plug top PSU
- DC power input option

### Physical and Environment

- Unit size: 224W 158D 34H mm
- Unit weight: 916g
- Packaging size: 335W 215D 100H mm
- Operating temperature 0°C to 40°C
- Industrial operating temperature range -20°C to 70°C option available
- Optional conformal PCB coating for harsh environments



### 6000 Series Models

Part Number	Number of Users	High Upload Speed	Quad Ethernet	ADSL ANNEX	V.92 Modem
GL6110A	5 concurrent VoIP + 5 concurrent data users		'	A	
GL6125A	5 concurrent VoIP + 5 concurrent data users		'	A	'
GL6110AM	5 concurrent VoIP + 5 concurrent data users	'	'	A or M	
GL6125AM	5 concurrent VoIP + 5 concurrent data users	'	'	A or M	'
GW6110A	Unlimited		'	A	
GW6125A	Unlimited		'	A	'
GW6110AM	Unlimited	'	'	A or M	
GW6125AM	Unlimited	'	'	A or M	'