



GW6000 Series ADSL Routers

Business Grade ADSL Routers for Managed SME Applications



Cost-effective business grade ADSL routers for:

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

The Virtual Access GW6000 series of Service Managed Gateways (SMGs) 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 network and IPSec VPN environments.

Ease of deployment, configuration management and remote support are key features of the 6000 series routers, 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

The 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 appliance 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 Appliance Monitoring

The 6000 series Service Managed Gateway appliances monitor connection status and produce historical service utilisation reports.

Using a range of statistical methods, the appliance 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, which works in conjunction with each Service Managed Gateway appliance installed at the edge of a customer's network. Monitor provides centralised access to appliance diagnostic and network availability status.

Access to the Monitor utility 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 networks.

Annex A and Annex M

Annex M supports high upload speeds. The GW6000 conforms to the BT Access Network Frequency Plan for both ADSL Annex A and Annex M.

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
- VA Activator smart file server support
- Configuration change log
- V.92 dial modem for out-of-band management
- SNMP agent
- Non-volatile battery-backed RAM log storage
- Telnet server

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
- Local and remote advanced configuration
- BOOTP client
- IP Address Translation
- Packet filtering and firewalling
- Performance Monitor

Routing Features

- Support for IP, TCP, UDP, ICMP, ESP, AH
- Static and dynamic IP routing algorithms
- Van Jacobson header compression
- PPP
- PAP/CHAP security
- RIP and RIP2
- 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

- RTP header compression
- 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) and DES (56bit) with explicit IV

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

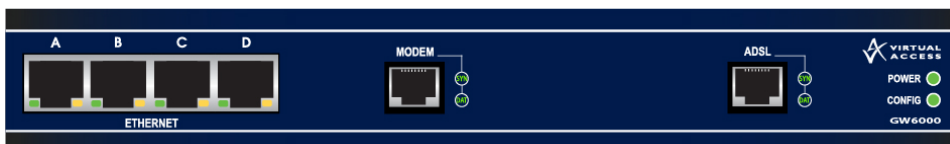
- EN60950 safety approval
- EN55022 and EN55024 EMC

Power

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

Physical and Environment

- Unit size: 224 W 158 D 34 H mm
- Unit weight: 916g
- Packaging size: 335 W 215 D 100 H mm
- Operating temperature 0°C to 40°C
- Industrial operating temperature range -40°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 | | • | A | |
| GL6110M | 5 | • | • | M | |
| GL6125A | 5 | | • | A | • |
| GL6125M | 5 | • | • | M | • |
| GW6110A | Unlimited | | • | A | |
| GW6110M | Unlimited | • | • | M | |
| GW6125A | Unlimited | | • | A | • |
| GW6125M | Unlimited | • | • | M | • |