

Designed for the Digitally Demanding



HomePortal® 3000 Series Intelligent Gateways

Designed specifically for high-bandwidth triple play services

By combining our industry-leading home networking platforms with the latest developments in FTTx and HomePNA 3.1 over coaxial networking, 2Wire has created a powerful solution for the delivery of IP video and other high-bandwidth applications over any flavor of FTTx deployment.

HomePortal® 3000 series intelligent gateways offer an integrated solution for delivering triple play services. The gateway's advanced modem seamlessly delivers voice, data, and video over VDSL. Support for both fiber to the node and fiber to the premises enables service providers to deploy a common gateway platform across multiple types of fiber deployments. Flexible home networking options—like Wi-Fi, HomePNA 3.1, and Ethernet—accommodate a variety of subscriber environments. In addition, HomePortal 3000 series gateways can be enhanced with optional applications like Content Screening, Access Controls, Firewall Monitor, and Web Remote Access.

Key Features & Benefits

Advanced Diagnostics

A full suite of diagnostics and statistical data delivers substantial information to pinpoint trouble on the line. Data is available through either the gateway user interface pages or TR-069 vendor extensions.

Flexible Networking Options

A variety of subscriber home networking environments are accommodated by the HomePNA 3.1 over coaxial networking interface for video distribution in the home, HyperG® high-powered 802.11b/g wireless access point and Ethernet, and optional USB device support on select models.

Triple Play Services Platform

Integrated data applications, built-in VoIP, support for wireless-wireline convergence, and multicast IGMP proxy and snooping for video enable superior triple play service delivery, while built-in QoS support gives service providers a flexible tool for edge policy enforcement.

Exceptional Manageability

The 2Wire gateway provides extensive support for the Broadband Forum TR-069 CPE WAN Management Protocol Standard and parameter model, as well as numerous vendor parameter extensions for functionality and statistics not defined by the Broadband Forum.

Powerful Wireless Technology

HyperG wireless technology virtually eliminates wireless “cold spots” in the home. HomePortal intelligent gateways increase wireless bandwidth by using 400 mW transmitters with additional receiver sensitivity. (Most comparable wireless access points provide less than 100 mW.)*

The 2Wire triple wireless antenna design extends wireless reach and boosts performance compared to other 802.11b/g wireless designs which have only two antennas. The extra antenna, used only for transmitting packets, prevents the power loss associated with switching antenna modes back and forth from transmit to receive. Antenna placement is optimized with a dedicated set of receive-only antennas, resulting in greater access point sensitivity and increased wireless throughput and range. Better range throughout the home means better delivery of enhanced services.

High-Speed Coaxial Networking

Along with traditional network interface options like Ethernet, USB (select models), and HyperG wireless, select HomePortal 3000 series intelligent gateways support high-speed coaxial networking, or HomePNA 3.1 over coax. HomePNA 3.1 enables the delivery of high-bandwidth triple play services, such as HD video, throughout the home over existing coaxial cables.

Integrated Voice over IP

2Wire gateways provide built-in VoIP port capabilities to support today’s wireline voice needs, and are also the convergence point for service providers and their mobility partners to offer wireline-wireless service convergence.

VoIP capabilities include full SIP ALG and back-to-back SIP user agent (proxy) to support additional ATA adapters, GSM-UMA (3GPP), and IMS (SCCAN Forum) Voice over Wi-Fi mobile phone support.

Professional Grade Firewall

With its fully configurable and manageable firewall, the HomePortal intelligent gateway provides firewall protection for up to 253 networked devices. The firewall actively detects and defends against common Internet threats (such as distributed denial of service attacks) using stateful packet inspection (SPI). It is also subscriber-friendly, enabling simple configuration setup for common in-home applications such as online gaming.

Carrier-Class QoS, Performance, and Manageability

Increasing competitive offerings by introducing IP-enabled triple play services through FTTN and FTTP networks also increases the need for a high-performance managed customer premises platform. The 2Wire software-enabled HomePortal gateway platform delivers the processing, voice DSP, and software programming flexibility necessary to manage future applications. High-performance DSL, SPI firewall, differentiated QoS, and VoIP processing functions are manageable virtually without limitation. Fully TR-069-compliant, HomePortal 3000 series intelligent gateways are manageable through any TR-069-compliant auto-configuration server. When combined

with the full management and software-upgrade capabilities of the 2Wire CMS remote management system, the HomePortal gateway is today’s triple play, future-proof platform.**

Remote Management

HomePortal 3000 series intelligent gateways are manageable through any TR-069-compliant auto-configuration server, such as industry-leading 2Wire CMS. A standards-based suite of carrier-class business applications that centralizes the management, monitoring, and delivery of services to customer premises equipment, CMS enables seamless control over all facets of broadband service delivery through the HomePortal gateway. CMS allows providers to remotely configure, manage, and troubleshoot deployed gateways, eliminating costly truck rolls and lengthy customer care calls. CMS also enables providers to quickly and efficiently deploy new revenue-generating services to subscribers individually or in large-scale groups.

*Configurable power setting to comply with country-specific power requirements.

**CMS is TR-069-based and includes both TR-098 QoS provisioning and TR-104 provisioning features.

Optional Enhanced Features

Go beyond the triple play by offering subscribers a suite of gateway-based services. In addition to the following services, the flexible HomePortal gateway platform can also support a variety of next generation applications designed to increase stickiness, revenue per user, and customer satisfaction.

Home Networking

Set up a high-speed home network quickly and easily; share files, printers, and a broadband connection with every computer and network-ready device in the home.

Parental Controls (Internet Access Controls and Content Screening)

Limit access to specific Websites, monitor browsing history and usage, and enforce time restrictions on common applications.

Firewall Monitor

Eliminate security issues before they have a chance to proliferate. Firewall Monitor watches for suspicious activity and notifies users about attacks.

Web Remote Access

Get fast, easy access to the HomePortal network remotely using just a standard Web browser, an Internet connection, and network password.

HomePortal 3000 Series Intelligent Gateways

Model Number	HomePNA 3.1	Broadband Interface	Ethernet Ports	Wireless Enabled	USB PC	USB Device	Voice Over IP
3600HGV	No	VDSL	4	HyperG	No	No	2 lines
3800HGV	Yes	VDSL or Broadband Ethernet	4	HyperG	Yes	Yes	2 lines
3800HGV-B	Yes	VDSL or Broadband Ethernet	4	HyperG	No	No	2 lines
3801HGV	Yes	VDSL or Broadband Ethernet	4	HyperG	No	No	2 lines

Technical Specifications

Local Network Interfaces

- Ethernet 10/100 with auto-crossover (4-port RJ-45)
- High-power HyperG access point (400 mW)
- HomePNA 3.1 interface: coax and twisted pair, utilizing CopperGate 3010 chipset (HomePortal 3800); coax, twisted pair with required dongle, utilizing CopperGate 3210 chipset (HomePortal 3801)

VoIP Functionality

- Derived voice lines via embedded RJ-14 ports (HomePortal 3800: 2 ports; HomePortal 3801: 1 port)
- SIP user agent interoperability with Broadsoft Broadworks v11.1, Nortel MCS 5200, Alcatel-Lucent IMS, and Sylantrio servers
- Audio codec: G.711, software upgradeable to support G.729a
- Software upgradeable to support back-to-back SIP user agent (proxy function)
- Voice over Wi-Fi support for UMA and IMS wireless mobile phones

HyperG Wireless Functionality

- 802.11g wireless access point, backwards compatible with 802.11b
- 10 power settings available through gateway user interface, up to 400 mW, for both 802.11b and 802.11g, configurable via CMS
- WEP64, 128; WPA; 802.1x
- Multi-SSID

Broadband Network Interfaces

- VDSL-DMT per G.993.1 standard
- VDSL Broadband interface over coax (HomePortal 3800 and 3801 only)
- Broadband Ethernet for FTTP applications (RJ-45)
- Broadband auto-detection feature (RJ-11, Coax, or RJ-45)

Software Tools and Diagnostics

- Greenlight™ provisioning available via factory-preloaded configuration files
- Bulletin messaging system integrated with 2Wire CMS for subscriber messaging
- Network support tool to monitor and fix email and browser application settings

Configuration

- Simple Web-based user interface for easy configuration and diagnostics
- Quick summary page with shortcuts to most commonly used features

Network Protocol Support

- IPv4, IPv6 capable, TCP, UDP, ARP, ICMP
- DHCP client/server, DNS client/server, HTTP client and server
- Single IP and multi-IP support
- Multicast IGMP Proxy, IGMP Snooping
- 802.1x broadband network authentication

Diagnostics and Management

- Remote management and provisioning via SSL connection from 2Wire CMS (Broadband Forum TR-069)
- Supports TR-069 extensions TR-098, TR-104, and TR-111
- Integrated gateway-based diagnostics automatically intervene during error conditions, intercept subscriber Web requests, and provide self-guided resolutions
- DNS Ping, ICMP Ping, Traceroute

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Technical Specifications, continued

- Web-based remote gateway technician view and remote management
- Multicolor indicator lights monitor the connection and assist with troubleshooting

Security

- Integrated firewall includes stateful packet inspection (Layer 4) and local IP spoofing verification
- Supports stealth mode operation
- Unique signed security certificate manufactured into each gateway for TR-069 management authentication

NAT/PAT Support

- Standard NAT/PAT between LAN and WAN
- Automated NAT pass-through for LAN client-initiated VPN tunnels (IPSec, PPTP, L2TP), SIP, H.323, RTP
- Easy-to-configure NAT pass-through (pinholes) for common applications (games, servers, etc.)
- DMZplus for automatic WAN IP assignment to a local PC
- Supports most popular ALGs: HTTP, FTP, H.323, AIM, MSGAMES, DIABLO, IPSEC-IKE/ESP, IRC, MSN, PPTP, RTP, RTSP, and SIP

Software Upgrade

- Secure TR-069 upgrade procedure via 2Wire CMS

Standard Hardware Features

- Vertical placement via provided stand
- Built-in wall mounting keyholes on HomePortal 3600, 3801; wall mounting bracket available separately for HomePortal 3801
- External power supply

Operating Environment

- Temperature: 0° to 40° C (32° to 104° F)
- Humidity: 8% to 95%, non-condensing
- Altitude: -197' - 7,000' MSL

Minimum Requirements

- Gateway manual configuration and Greenlight installations require a standard Web browser (HTTP VX or higher)
- All computers and devices to be connected to the gateway must have an Ethernet network interface card, 802.11b/g wireless adapter, or available USB port (Windows 98, 2000, ME, XP, or Vista only. Mac OS 8.6 to 9.x, and 10.2 or higher)

Visit us on the Web at 2Wire.com to learn more about our integrated broadband products, services, and solutions.



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