Voice-enabled uDSL Gateway

Bolster the bottom line with a gateway that provides the superior reliability service providers need and the home networking performance subscribers crave.

The Pace 5031NV intelligent gateway enables superior triple-play service delivery with best-in-class 802.11n wireless performance, built-in VoIP, and multicast IGMP proxy and snooping for video.

Superior Wireless Performance
High-powered 802.11n wireless technology from Pace virtually eliminates wireless “cold spots” in the home. Pace intelligent gateways provide up to four times the true power of traditional access points and increase wireless range by using high-power (almost 400 mW) transmitters.* The Pace 5031NV gateway’s superior transmit power and receive sensitivity, in conjunction with optimized antenna placement, boosts performance compared to typical 802.11n wireless designs. Better range throughout the home means greater customer satisfaction with wireless coverage.

Integrated Voice over IP
Pace gateways provide built-in VoIP port capabilities to support today’s wireline voice needs. Pace gateways also act as the convergence point for service providers and their mobility partners to offer wireline-wireless service convergence. VoIP capabilities include a full SIP ALG and back-to-back IP user agent (proxy) to support additional ATA adapters.

Robust Firewall
With its fully configurable and manageable firewall, the Pace intelligent gateway provides firewall protection for up to 253 networked devices without affecting routing speed. The firewall actively detects and defends against common Internet threats (such as distributed denial of service attacks) using stateful packet inspection. It is also subscriber-friendly, enabling simple configuration setup for common in-home applications such as online gaming.

Streamlined management
The Pace 5031NV intelligent gateway drastically simplifies both gateway and application management; remote management is supported with any TR-069-compliant auto-configuration server, such as Pace’s industry-leading ECO Manage device management system.

ECO Manage gives providers a valuable insight into the customer’s network, enabling them to remotely configure, manage and troubleshoot deployed gateway devices, eliminating costly truck rolls and lengthy customer care calls. Additionally, IP-based services can be remotely managed using the web-based ECO Service Management tools. ECO Service Management can reduce operational expenses, shorten time-to-market for next-generation services, and increase customer satisfaction.

* Most wireless access points provide less than 100 mW.

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**Key Features and Benefits**
- Intelligent services delivery platform
- Universal ADSL2+ / VDSL2 transceiver with auto-sensing
- Carrier-Quality TR-069 and TR-104 Network Platform
- Hardware QoS for Managing Data, Voice and Video Traffic
- Professional-Grade Firewall
- Low Total Cost of Ownership

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**Main Interfaces**
- ADSL2+ / VDSL2
- Ethernet WAN
- 4 10/100 Ethernet LAN Ports
- 1 x USB Host
- 2 x FXS Ports
- 802.11b/g/n Wireless Access Point (2.4 GHz, 2x2 MIMO 802.11n)
Technical Specifications

Local Network Interfaces
- 4 port 10/100 Ethernet with auto-crossover (RJ-45)
- IEEE 802.11b/g/n wireless access point
- Broadband Network Interfaces
  - Integrated uDSL modem
  - 10/100Base'T Ethernet WAN port

ADSL
- ADSL 1, ADSL 2, ADSL 2+
- T1.413 Issue 2, G.992.1, G.992.3, G.992.5
- TR-067- and TR-100-compliant
- ANSI and ETSI loops
- Annex A and L support
- Extended frames support
- Cabinet mode support

Wireless Functionality
- IEEE 802.11n wireless access point, backwards compatible with IEEE 802.11b/g
- Multiple power settings available via gateway user interface, up to 25+1 dBm, for IEEE 802.11b, IEEE 802.11g, and IEEE 802.11n (remotely configurable via CMS management system)
- Security: Encryption types WEP64, WEP128, WPA, WPA2
- Automatic channel selection with interference detection
- MAC-based filtering
- Multiple SSID support

VoIP Functionality
- Optional: Two (2) derived voice lines via embedded RJ-14 jack
  - Audio codec: G.711, G.729a and G.722

Software Tools and Diagnostics
- Zero-touch provisioning available via factory-preloaded configuration files
- Simple Web-based user interface for easy configuration and diagnostics
- Quick summary page with shortcuts to most commonly used features

Network Protocol Support
- ATM UNI, UBR, VBRnrt, VBRrt, CBR
- Support up to four ATM PVCs in any configuration
- IPv4, TCP, UDP, ARP, ICMP, IPv6 capable
- DHCP client/server, DNS client/server, HTTP client/server
- Single IP and multi-IP support
- Multicast-static support for mapping public IP addresses
- Support up to four PPP links and up to four PVCs

Diagnostics and Management Tools
- Remote management and provisioning via SSL connection from Pace ECO Manage or other TR-069-compliant ACS
- Supports TR-069 extension TR-098
- Integrated gateway-based diagnostics automatically intervene during error conditions, intercept subscriber Web requests, and provide self-guided resolutions
- ATM Ping, DNS lookup, ICMP Ping, Traceroute
- Web-based remote gateway technician view and remote management
- Multicolor indicator lights monitor the connection and assist with troubleshooting

Software Upgrade
- Secure TR-069 software updates procedure via Pace ECO Manage system

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 computer
- Supports most popular ALGs: HTTP, FTP, H.323, AIM, MSGAMEs, DIABLO, IPSec-ike/esp, IRC, MSN, PPTP, RTP, RTSP, and SIP

Standard Hardware Features
- TR-068-compliant industrial design and LED indicators
- Vertical placement via provided stand or horizontal desktop placement
- External power supply with power on/off switch

Physical Specifications
- With stand: 8.4” x 3.1” x 8.8” (21.4 cm x 8 cm x 22.3 cm)
- Without stand: 7.5” x 1.5” x 7.6” (19.1 cm x 3.9 cm x 19.4 cm)

Power Supply
- PSU: 12V 3A
- Ungrounded
- 2-prong non-polarized AC plug

Memory
- 64 MB Flash standard, up to a maximum of 128 MB
- 128 MB RAM

Operating Environment
- Temperature: 32° to 104° F (0° to 40° C)
- Humidity: 5% to 95%, non-condensing
- Altitude: -197’ – 6,000’ MSL

For more information on Pace products, please visit our website - www.pace.com/americas