

ZyXEL



www.zyxel.com/green

- HPNA 3.1 with high speed and robust home connectivity over coax
- Dual-mode VDSL2/ADSL2+ functionality
- Dedicate Giga speed port for WAN connectivity
- 300 Mbps Wireless N function built in
- IP QoS support
- Remote provision and management through TR-069

VSG1435-B101
802.11n Wireless VDSL2
4-port Gateway with
HPNA3.1

High-speed VDSL2 Gateway with HPNA for Triple Play Services

Benefits

HPNA 3.1 with high speed and robust home connectivity over coax

The HPNA feature is based on the widely deployed HomePNA 3.1 (ITU G.9954) industry standard aiming at delivering a consistent and robust transmissions for home multimedia applications. Leveraging the already existed coaxial cable, it brings less performance impact than other technologies and is capable of stable video content transmissions. The operators can easily push IPTV contents from video sources to the set-top boxes attached to TV sets through gateways without laying any new wire. This not only speeds up the IPTV service installation, but also reduces the CAPEX required. Multi-room HD experience can easily be delivered by adopting the HPNA 3.1 over the coax concept too.

Robust transmission with no new wire — the HPNA 3.1 is a good alternative for your in-house connectivity

Dual-mode VDSL2/ADSL2+ functionality

The VSG1435-B101 offers dual-mode VDSL/ADSL2+ functionality in one box. The dual-mode function can detect the configuration of central side line card and adapt to the service mode require by the user; With the dual-mode function, the operators can acquire one box for both short-range, high-speed VDSL and long-range ADSL services deployment. This significantly saves the OPEX that operators have to spend on managing many different devices.

Dedicate Giga speed port for WAN connectivity

The VSG1435-B101 has a dedicate Gigabit ETH WAN port equipped. It provides an option for operators. When ISP migrates the service from VDSL2 to PON or WiMAX, subscribers can keep the existing VSG1435-B101 for terminating the IP-connection via the Ethernet WAN instead of the original DSL WAN. In most cases, the end users can still experience the original CPE, which is better than the case that customers have to change the current CPE due to the difference of physical connections.

802.11n technology for extreme performance and coverage

The VSG1435-B101 featuring 802.11n Technology provides the ultimate solution for speed and coverage. With data rate up to 300 Mbps, VSG1435-B101 provides stable and reliable wireless connections for high speed data and multimedia delivery. It eliminates dead zones and extends coverage by using coming IEEE 802.11n technology and backwards compatible with any IEEE 802.11b/g Wi-Fi certified device.





VSG1435-B101 802.11n Wireless VDSL2 4-port Gateway with HPNA3.1

Quality of Service (QoS)

With IP QoS features, service providers can base on their service plan to freely design their QoS policy and prioritize the mission-critical services such as IPTV and VoIP. This increases the network efficiency and also the productivity to enable the service providers to bring the real multi-play into residential user's life.

Remote provision and management through TR-069

With TR-069 standard management specifications, service providers are able to manage and configure the client devices remotely without end-user's manual intervention. This unique feature not only offers user truly "Plug and Play" experience but also reduce the complexity of deployment and therefore saves service providers' operation and maintenance costs.

Specifications

System Specifications

VDSL Compliance

- ITU-T G.993.2 VDSL2 (Profile: Up to 17a support with 100 Mbps/45 Mbps downstream/upstream rate)
- Dual latency
- INP value up to 16
- PhyR PHY Level Retransmission Technology

ADSL Compliance

- G.992.1 (G.dmt), G.992.2 (G.lite), G.992.3 (ADSL2), G.992.5 (ADSL2+) compliant, Annex A, L and M
- ADSL physical connection ATM AAL5 (ATM Adaptation Layer type 5)
- Support multi-protocol over AAL5 (RFC2684/1483)

IEEE 802.11n Compliance

- Frequency: 2.4 GHz
- Data rate: 300 Mbps
- Backward compatible to 802.11b/g
- 64/128 bits WEP data encryption
- WPA/WPA2 (Wi-Fi Protected Access) Security
- WPS (Wireless Protected Setup)
- WDS (Wireless Distribution System)

HPNA

- ITU-T G9954 HomePNA 3.1
- Over Coaxial
- Data rate: 320 Mbps

USB

- File sharing
- Printing server support

Router

- NAT (includes multi-to-multi NAT)/SUA
- Dynamic DNS
- DHCP client/server/relay with DHCP option 60
- PPPoE, PPPoA
- RIP I/RIP II
- IGMP v1, v2, v3
- IGMP Proxy, Snooping
- UPnP

Firewall/Security

- Stateful Packet Inspection (SPI)
- Denial of Service (DoS) Prevention
- Multiple VPN (IPSec, PPTP) pass-through
- Packet Filtering
- URL keyword blocking
- Parental Control

QoS

- Support flexible packet classification
- Support Tag Processing (802.1p/802.1q, DSCP)
- Priority Queuing and Scheduling

Management

- Embedded web configuration
- TR-069, TR-098 remote management
- TR-064 local management
- Logs and statistics
- Command Line Interpreter (CLI) via Telnet

Hardware Specifications

- WAN:
 - One RJ-11 port for VDSL2/ADSL2+ over POTS
 - One RJ-45 port for Gigabit Ethernet, 10/100/1000Base-T
- LAN:
 - Four RJ-45 ports for Fast Ethernet, 10/100Base-T
- Wireless LAN: One external 2 dBi antenna and one internal 2 dBi antenna
- HPNA interface: One coaxial F-connector for HPNA 3.1
- USB: One type-A USB connector for USB 2.0 host interface
- WLAN/WPS button: One real button for WLAN on-off and WPS configuration
- Reset: One restore factory default button
- Status LEDs indicator: POWER, ETHERNET, ETHERNET WAN, USB, HPNA, DSL, INTERNET, WLAN/WPS
- Power input: 12 V DC 1.5 A

Physical Specifications

- Item weight: 471 g (1.04 lb)
- Item dimensions:
 - 40 (W) x 154 (D) x 210 (H) mm
 - (1.57 (W) x 6.06 (D) x 8.27 (H) inches)
- Item and package weight: 952 g (2.1 lb)
- Package dimensions:
 - 66 (W) x 225 (D) x 270 (H) mm
 - (2.6 (W) x 8.86 (D) x 10.63 (H) inches)

Environmental Specifications

Operating Environment

- Temperature: 0°C ~ 40°C
- Humidity: 20% ~ 85% RH (non-condensing)

Storage Environment

- Temperature: -20°C ~ 60°C
- Humidity: 20% ~ 90% RH (non-condensing)

Certification

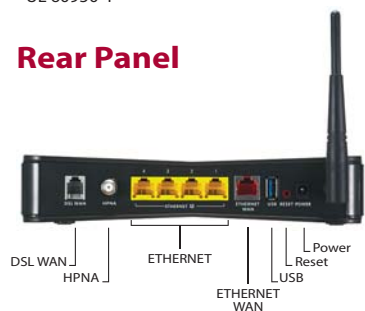
EMC

- FCC Part 15 (Class B)

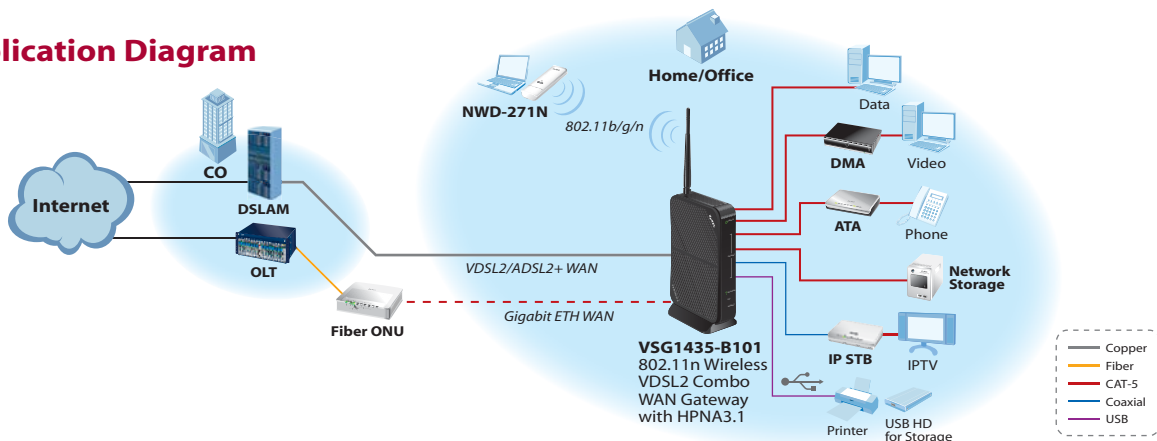
Safety

- UL 60950-1

Rear Panel



Application Diagram



For more product information, visit us on the web at www.ZyXEL.com



Copyright © 2010 ZyXEL Communications Corp. All rights reserved. ZyXEL, ZyXEL logo are registered trademarks of ZyXEL Communications Corp. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.