ZyXEL

Very High-speed 802.11n VDSL2 Wireless Gateway with USB

- **VDSL2 Vectoring for maximized service coverage**
- **2.4 GHz 11n (2x2) for superior performance and coverage**
- **Remote provisioning and management through TR-069**
- **Always-online, always-compatible alternative 3G connection**

Benefits

VDSL2 Vectoring for maximized service coverage

The ZyXEL VMG1312-B Series Wireless N VDSL2 4-port Gateway with USB supports Vectoring technology that eliminates cross-talk or interference among different VDSL lines. With the mechanism, Vectoring significantly increases bit rates to compete with cable/fiber technology as well as to enlarge service coverage without changing the current infrastructure—a way to significantly save cost comparing to fiber-to-the-home (FTTH) deployments and CAPEX can also be optimized by the improved data rates and coverage without upgrading equipment.

2.4 GHz 11n (2x2) for superior performance and coverage

The ZyXEL VMG1312-B Series features 802.11n technology to provide the ultimate solution for both speed and coverage. With 802.11n wireless data rates of up to 300 Mbps, the VMG1312-B Series provides stable, reliable wireless connections for high-speed data and multimedia applications. The 802.11n technology empowered the device to eliminate dead zones and extend coverage while retaining backward compatibility with any certified device.
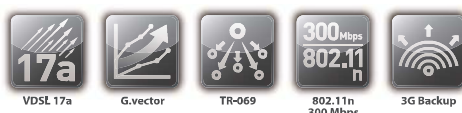
Remote provisioning and management through TR-069

Taking advantage of the TR-069 standard-compliant management specifications, service providers are able to manage and configure client devices remotely without manual intervention from end users. This unique feature not only offers users with true "plug-and-play" experience, but also reduces deployment complexity and therefore saves operating and maintenance costs for service providers.

Always-online, always-compatible alternative 3G connection

The ZyXEL VMG1312-B Series features optional 3G connectivity as a failover (or alternative) connection to 3G mobile broadband networks in case of DSL outage; with which Internet traffics will be temporarily routed through the user's 3G dongle plugged into the USB port. All traffics will be switched back as soon as the regular broadband service becomes available again. It is also efficient to have instant Internet access in remote offices, activities outside of the offices or for occasions where DSL service is temporarily unavailable. The VMG1312-B Series works with most 3G dongles from mobile broadband SPs thanks to the latest 3G compatibility list and frequently revised patch file on the global Web site. Users can simply check and download the patch file to enable mobile broadband services immediately without upgrading the entire firmware of the gateway.

ZyXEL green

VMG1312-B Series
Wireless N VDSL2+ 4-port Gateway with USB

17a			300 Mbps 802.11n	
VDSL 17a	G.vector	TR-069	802.11n 300 Mbps	3G Backup

Specifications

System Specifications

VDSL Compliance
- ITU-T G.993.2 VDSL2, band plan 997, 998
- Support VDSL profile: 8a/b/c/d, 12a/b, and 17a
- Rate adaption
- Dual-latency
- Seamless Rate Adaption (SRA)
- INP: up to 16 symbols
- PTM mode
- G.INP
- G.vector (G.993.5)
- PhyR configurable

ADSL Compliance
- ITU-T G.992.1 (G.dmt) compliant
- ITU-T G.992.2 (G.lite) compliant
- ITU-T G.992.3 (ADSL2) compliant
- ITU-T G.992.5 (ADSL2+) compliant
- Reach-Extended ADSL (RE ADSL)
- Seamless Rate Adaption (SRA)
- Support VC-based and LLC-based multiplexing

WLAN
- IEEE 802.11 b/g/n compliance
- Frequency: 2.4 GHz
- Data rate: 300 Mbps
- WPA/WPA-PSK, WPA2/WPA2-PSK
- WEP data encryption 64/128 bit
- Wireless Protected Setup (WPS)
- Multi SSID (up to 4) and hidden SSID support

USB
- File sharing
- 3G backup support

Bridge/Router
- PPPoE (RFC2516)
- PPPoA (RFC2364)
- DHCP client/server/relay
- DNS proxy
- Dynamic DNS
- RIP I/RIP II supported
- UPnP
- Static/policy route
- QoS classification route

Firewall/Security
- PAP and CHAP support
- MS-CHAPv1 and v2 support
- Stateful Packet Inspection (SPI)
- DoS Attack Prevention
- Parental Control

QoS
- Queuing and scheduling
- Queue management

Management
- Web GUI
- Command Line Interpreter (CLI) via SSH or Telnet
- Firmware upgrade via Web/FTP/TFTP
- DSL forum TR-064, 069, 098,111
- Configurable access control for remote management

Hardware Specifications
- WAN:
  - One RJ-11 port (VMG1312-B10A) for VDSL/ADSL2+ over POTS
  - One RJ-45 port (VMG1312-B30A) for VDSL/ADSL2+ over ISDN
- LAN: Four Fast Ethernet ports
- WLAN: Two internal antennas
- USB: One for USB2.0 host interface
- WLAN/WPS button: One real button for WLAN on/off and WPS configuration
- Reset/Restore button: One real button for restore factory default settings
- Status LED indicator: Power, Ethernet, DSL, Internet, WLAN/WPS, USB

Physical Specifications
- Item dimensions (WxDxH): 186 x 121 x 39 mm (7.32" x 4.76" x 1.54")
- Item weight: 245 g (0.54 lb.)
- Packing dimensions (WxDxH): 300 x 195 x 50 mm (11.81" x 7.68" x 1.97")
- Packing weight: 540 g (1.19 lb.)

Environmental Specifications

Operating Environment
- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 95% RH (Non-condensing)

Storage Environment
- Temperature: -30°C to 60°C (-22°F to 140°F)
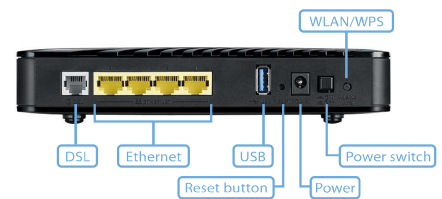- Humidity: 20% to 95% RH (Non-condensing)
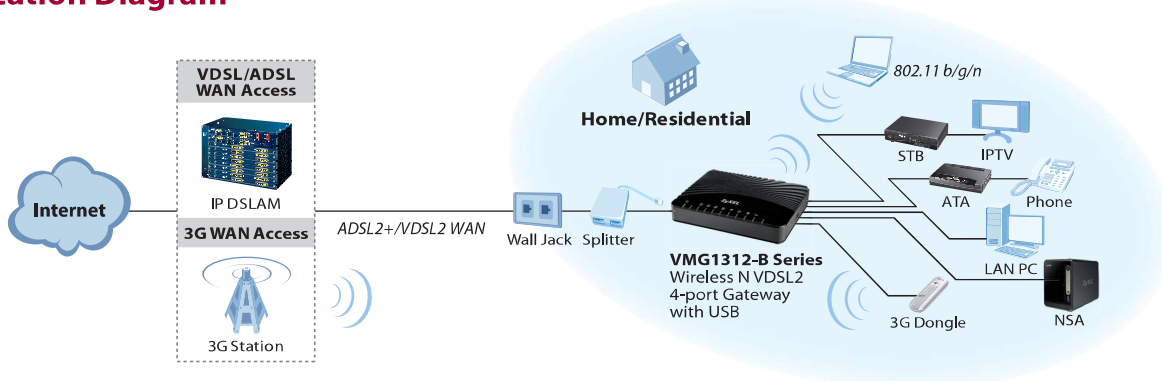
Certification
- EMC: CE, FCC
- Safety: CE

Product Description
- VMG1312-B10A: Wireless N VDSL2 4-port Gateway with USB over POTS
- VMG1312-B30A: Wireless N VDSL2 4-port Gateway with USB over ISDN

Rear Panel

WLAN/WPS

DSL | Ethernet | USB | Power switch
Reset button | Power

Application Diagram

VDSL/ADSL WAN Access
IP DSLAM
3G WAN Access
3G Station
Internet
ADSL2+/VDSL2 WAN
Wall Jack Splitter
VMG1312-B Series
Wireless N VDSL2 4-port Gateway with USB
Home/Residential
802.11 b/g/n
STB IPTV
ATA Phone
LAN PC
3G Dongle NSA

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