



VDSL2 Vectoring and Dual-Band Wireless for Extreme Performance

- **VDSL2 Vectoring for maximized service coverage**
- **Combo WAN-in-a-box for optimized CAPEX in FTTH/VDSL2 deployments**
- **5 GHz 11ac (3x3) for smooth, optimized HD IPTV services everywhere**
- **2.4 GHz 11n (2x2) for superior performance and coverage**
- **Advanced QoS to ensure the quality of triple-play services**
- **Intelligent CoC saves energy with rich green features**
- **TR-069/TR-181 i2 remote management**

The ZyXEL VMG3925-B10B is an advance Wireless AC VDSL2 gateway that provides autosensing between VDSL2 and ADSL2+ for high-speed Internet access. In addition, G.vector supports allow it to increase bitrates and coverage to compete with other broadband technologies without altering the infrastructure.

The ZyXEL VMG3925-B10B integrates an IEEE 802.11 a/b/g/n/ac access point and a Gigabit Ethernet switch for LAN access. The extreme routing performance enables it to act as a concentrator or power hub to distribute all contents among different devices connected to the LAN wired or wirelessly. The Wi-Fi functions have been specially enhanced to ensure high-quality user experience.

Additionally, it is designed with multiple WAN functions suitable for future FTTH deployments with optimized CAPEX.

Users can also take advantages of the USB interface on the ZyXEL VMG3925-B10B for file sharing or connecting a 3G/4G USB dongle for mobile networks.

Benefits

Latest 802.11ac wireless technology three times faster than 802.11n

The ZyXEL VMG3925-B10B provides high-throughput of up to 1300 Mbps* – 3 times the speed of 802.11n technology at the 5 GHz band. In addition, with the new antenna design and layout, the VMG3925-B10B eliminates dead zones and delivers high-quality full-HD video to multiple devices with IEEE 802.11 a/b/g/n Wi-Fi certification throughout the house.

VMG3925-B10B
Dual-Band Wireless AC/N
VDSL2 Combo WAN Gigabit
Gateway with USB



G.vector for optimized performance and CAPEX

The ZyXEL VMG3925-B10B supports Vectoring technology that eliminates cross-talk or interference among different VDSL lines. With the mechanism, Vectoring significantly increases bitrates to compete with cable/fiber technology as well as to enlarge service coverage without altering the current infrastructure – a way to save cost significantly comparing to fiber-to-the-home (FTTH) deployments, and CAPEX can also be optimized by the improved data rates and coverage without upgrading the equipment.

Combo WAN for simplified ISP logistics and optimized CAPEX

With the ZyXEL VMG3925-B10B, there's no need for service providers to invest on and deploy new CPEs at customer sites when customers migrate from ADSL2+ or VDSL2 to PON or LTE. All they need to do is to unplug the DSL line, and then plug the Ethernet cable to the Ethernet WAN port as the existing VMG3925-B10B terminates IP connections via the WAN interface. In most cases, users can still connect with the original CPE to avoid replacing the unit due to the difference between physical connections.

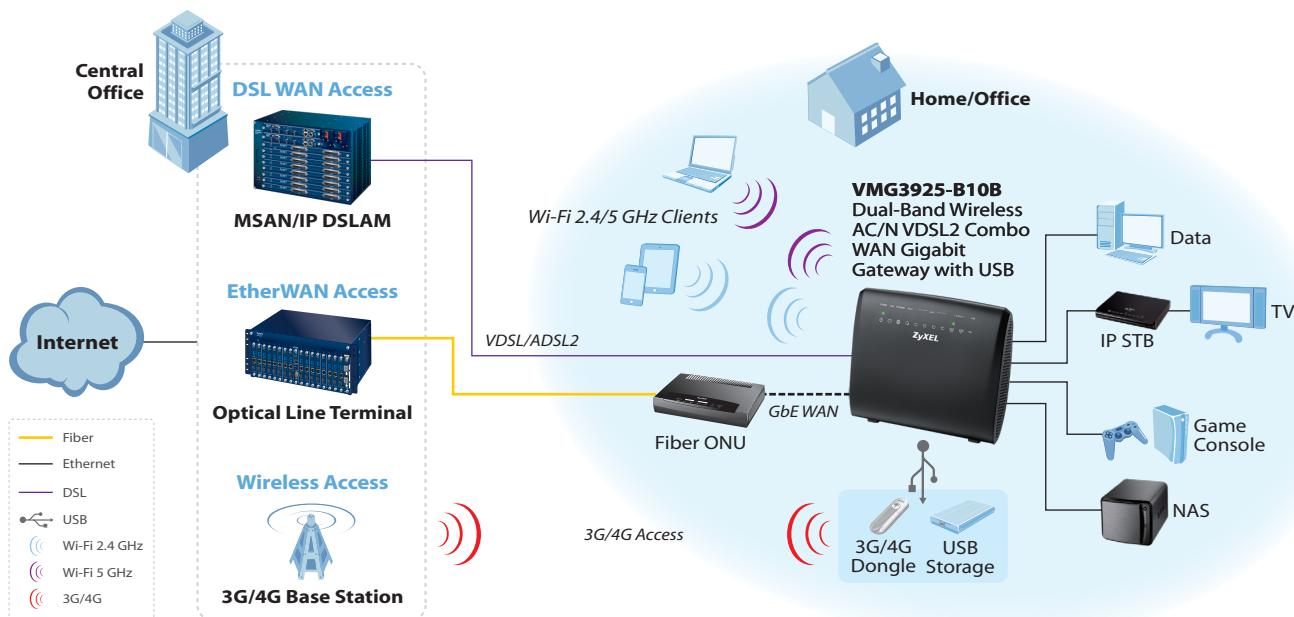
Quality of Service (QoS) support

With QoS features, service providers can freely design their QoS policies and prioritize the mission-critical services such as IPTV and VoIP based on their service plan offerings. This increases network efficiency and productivity that enable service providers to offer a real multi-play solution meeting the needs of residential users.

TR-069/TR-181 issue-2 remote management

The ZyXEL VMG3925-B10B incorporates the TR-069 standard management specifications for service providers to manage and configure client devices remotely without end-user intervention. This feature offers a true “plug-and-play” experience while reducing deployment complexity to help saving the operating and maintenance costs for service providers.

Application Diagram



Specifications

System Specifications

Wireless Standard

- 802.11b/g/n 2.4 GHz
- 802.11a/n/ac 5 GHz

VDSL and ADSL Compliance

- VDSL2: ITU G.993.2: Band 997, 998 (over POTS)
- ADSL2+: ITU G.992.5
- ADSL2: ITU G.992.3
- ADSL (G.dmt): ITU G.992.1 Annex A
- ADSL (G.lite): ITU G.992.2 Annex A
- ANSI T1.413
- ITU G.994.1 (G.hs): Handshake procedure
- ITU G.998.4 (G.inp): Retransmission
- ITU G.993.5 (G.vector)

Router/Bridge Features

- IEEE 802.1d transparent bridge
- PPP over Ethernet (RFC 2516)
- MAC encapsulation routing/IPv4
- NAT/NAPT
- NAT server (Port forwarding)
- DHCP client/server/relay
- DNS proxy
- Static route/policy routing
- IGMP v1, v2, v3
- ATM traffic classes (UBR, CBR, VBR-rt, VBR-nrt)
- IP QoS (802.1p, Diffserv, ToS)
- VLAN (802.1q port based and tag based)
- IP protocol v6 (IPv6)

Wireless

- 802.11ac 5 GHz with 1.3 Gbps data rate
- 802.11n 2.4 GHz with 300 Mbps
- Wireless Protected Setup (WPS)
- WEP data encryption (64/128 bit)
- WPA/WPA2, WPA-PSK/WPA2-PSK
- Wi-Fi scheduling
- Multiple SSID (up to 4)

VLAN/QoS

- Support flexible traffic classification
- 6-bit DiffServ code point (DSCP, RFC 2474)
- 802.1P 3-bit Class of Service (CoS)
- 802.1Q 12-bit VLAN ID

Security

- Firewall
- Generic packet filter
- DOS attack prevention
- Parental control

USB

- File sharing
- 3G/4G dongle

Management

- Web GUI (HTTP/HTTPS)
- Command Line Interface (CLI)
- UPnP
- Firmware upgrade via HTTP/FTP/TR-069
- DSL forum TR-069/TR-098/TR-111/TR-064/TR-181 i2
- 802.1ag Connectivity Fault Management (CFM)

Hardware Specifications

- WAN:
 - One RJ-11 interface for VDSL (over POTS)
 - One RJ-45 connector for Giga-Ethernet WAN port
- LAN: Four 10/100/1000M auto MDI/MDI-X RJ-45 ports
- Wireless:
 - 2.4 GHz two 2 dBi internal antennas
 - 5 GHz three 2 dBi internal antennas
 - Button: Reset, WPS/WLAN on/off
 - 1 USB 2.0 host interface (for file sharing/3G/4G backup)

- Status LEDs indicators: PWR/SYS, DSL, INTERNET, WAN, ETHERNET, WiFi 2.4G, WiFi 5G, and USB

Physical Specifications

- Item dimensions (WxDxH): 183 x 150 x 25 mm (7.2" x 5.9" x 0.98")
- Item weight: 275 g (0.60 lb.)
- Packing dimensions (WxDxH): 248 x 196 x 69 mm (9.76" x 7.71" x 0.22")
- Packing weight: 700 g (1.54 lb.)

Environmental Specifications

Operating Environment

- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 90% (Non-condensing)

Storage Environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 95% (Non-condensing)

Certification

- Safety: CE-LVD
- EMC: CE

Package Contents

- Wireless router
- Power adapter
- Ethernet cable
- Quick start guide

* The maximum wireless data transfer rate is derived from IEEE Standard 802.11 specifications. Actual data transfer rate will vary from network environment including: distance, network traffic, building site materials/construction, interference from other wireless devices, and other adverse conditions.

Front Panel



Rear Panel



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



Copyright © 2015 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.

