



802.11 ac/n Dual-WAN VDSL2 VoIP Combo WAN Gigabit IAD for Residences

- VDSL2 vectoring for maximized service coverage
- Combo WAN-in-a-box for optimized CAPEX in FTTH/VDSL2 deployments
- Extreme routing performance for FTTx applications
- 5 GHz 11ac (3x3) for smooth, optimized HD IPTV services everywhere
- 2.4 GHz 11n (2x2) for superior performance and coverage
- Intelligent CoC saves energy with rich green features

Benefits

G.vector to optimize performance and CAPEX

The ZyXEL VMG8924-B10A supports Vectoring technology that eliminates cross-talk or interference among different VDSL lines. With the mechanism, Vectoring significantly increases the bit rates to compete with cable/fiber technology as well as to enlarge the service coverage without changing 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 VMG8924-B10A, there's no need for service providers to invest on and replace 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 CPE VMG8924-B10A will be used to terminate the 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 of physical connections.

802.11 ac technology for extreme performance and coverage

The ZyXEL VMG8924-B10A features 802.11ac technology to provide the ultimate solution for both speed and coverage. With 802.11ac wireless data rates of up to 1.3 Gbps, the VMG8924-B10A provides stable, reliable wireless connections for high-speed data and multimedia usages. The 802.11ac technology empowered the device to eliminate dead zones and extend coverage while retaining backward compatibility with any Wi-Fi certified device.

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 remote management

The ZyXEL VMG8924-B10A incorporates the TR-069 standard management specifications for service providers to manage and configure client devices remotely without any 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.



VMG8924-B10A
Dual Band Wireless AC/N
VDSL2 VoIP Combo WAN
Gigabit IAD

Specifications

System Specifications

Wireless

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

VDSL and ADSL Compliance

- VDSL/ADSL2+ compliance
- VDSL2 (G.993.2), band plan Annex A, Annex B (over POTS)
- Support profile 8a, 8b, 8c, 8d, 12a, 12b, 17a
- VDSL1 (G.993.1)
- ADSL2+ (G.992.5) support Annex A, I, M
- ADSL2 (G.992.3) support Annex A, I, L, M
- ADSL (G.992.1) Annex A
- ANSI T1.413 issue 2
- G.INP (G.998.4)
- G.vector (G.993.5)

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

Router/Bridge Features

- IEEE 802.1d transparent bridge
- PPP over Ethernet (RFC 2516)
- MAC encapsulation routing/IPoE
- Network Address Translation (NAT)/Network Address Port Translation (NAPT)
- NAT server (Port forwarding)
- DHCP client/server/relay
- DNS proxy/dynamic DNS
- Static route/policy routing
- IGMP v1, v2
- IP protocol v6 (IPv6)

Voice Functionality

- SIP v2 (RFC 3261)/SDP (RFC2327/3264)
- RTP/RTCP (RFC1890)
- Codec: G.711, G.726, G.722
- G.168 echo cancellation
- Voice Activity Detection (VAD)/Comfortable Noise Generator (CNG)
- Dynamic jitter buffer
- Dual Tone Multi Frequency (DTMF)
- CLIP/CLIR

Phone Features

- Caller ID (FSK.DTMF)
- Call forwarding (No condition, Busy, No answer)
- Call transferring (Blind, ConsultOnHold, Attendant)
- Three way conference
- Abbreviated dialing (Speed dial)
- Interactive Voice Response (IVR)
- Flash hook timer
- Message waiting indicator (RFC 3842)
- T.38 fax relay
- Transparent fax rely over G.711
- Flexible dial plan (RFC3525 section 7.1.14)

Security

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

USB

- File sharing
- 3G backup

Management

- Web GUI (HTTP/HTTPS)
- Command Line Interface (CLI)
- Firmware upgrade via HTTP/FTP/TR-069
- DSL forum TR-069/TR-098/TR-111/TR-064
- 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:

- Two internal 3 dBi antennas (2.4 GHz)
- Three internal 3 dBi antennas (5 GHz)

• Button:

- One reset button
- One WPS on/off switch button
- One WLAN on/off switch button

• One LED on/off switch

• Two FXS ports

• Two USB 2.0 host ports

• Status LEDs indicators: PWR/SYS, DSL, INTERNET, WAN, ETHERNET, WiFi 2.4G, WiFi 5G, Phone1, Phone2, USB1 and USB2

• Power supply: 12 V DC 2 A

Physical Specifications

• Item dimensions (WxDxH):

206 x 181 x 35 mm (8.11" x 7.12" x 1.38")

• Item weight: 560 g (1.24 lb.)

• Packing dimensions (WxDxH):

325 x 245 x 66 mm (12.79" x 9.64" x 2.6")

• Packing weight: 1,090 g (2.41 lb.)

Environmental Specifications

Operating Environment

- Temperature: 0°C to 40°C
- Humidity: 20% to 85% (Non-condensing)

Storage Environment

- Temperature: -30°C to 60°C
- Humidity: 20% to 90% (Non-condensing)

Certification

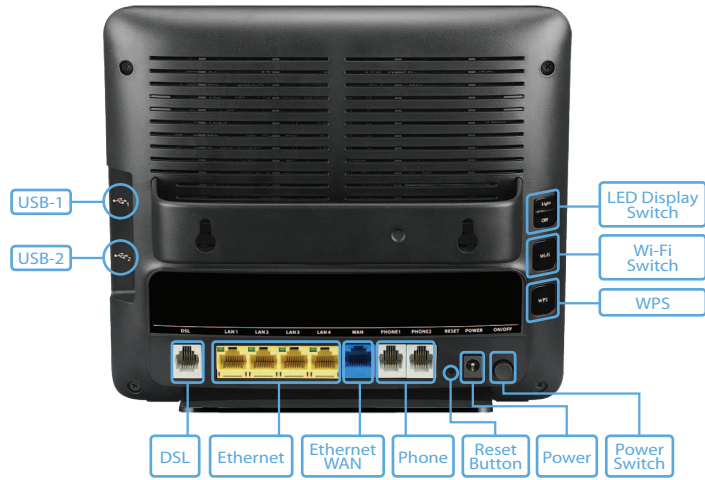
EMC

- EN61000-3-2, EN61000-3-3, EN55022 Class B

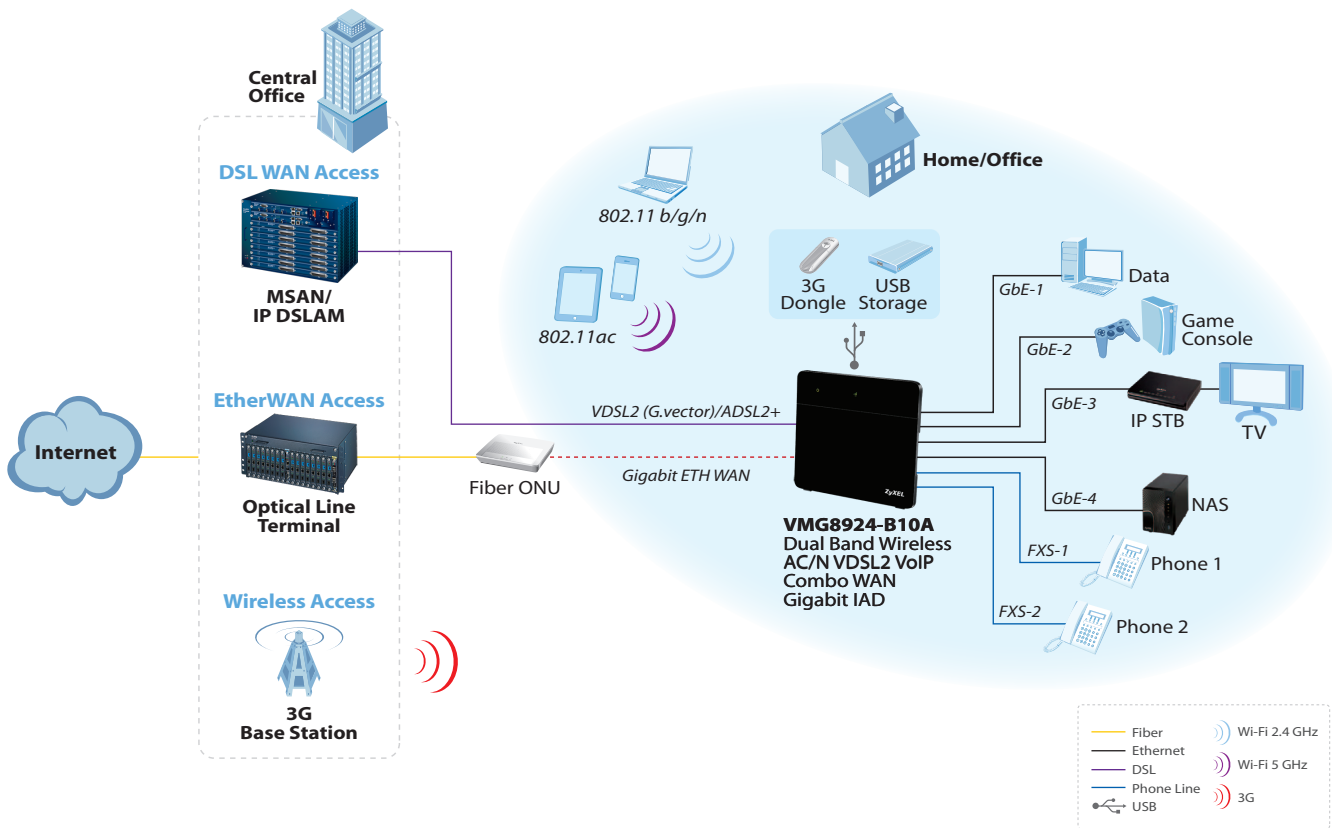
Safety

- EN60950-1

Rear Panel



Application Diagram





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