



AC2050 WiFi, Bonded VDSL2 Gateway with Voice (Optional)

- **VDSL2 bonding support up to profile 17a**
- **G.Vector support improves broadband performance by up to 150%**
- **AC2050, dual-band WiFi with 1.7Gbps* 802.11ac Wave 2 technology delivering performance boosting features that include Multi-User MIMO (MU-MIMO) and Beamforming**
- **Carrier-grade Quantenna 11ac with 4x4 antenna configuration, optimized for video streaming and IPTV**
- **High powered Wi-Fi on both the 5GHz and 2.4GHz bands for extended coverage and performance**
- **TR-69 remote device management supporting the latest TR181 data model**
- **2 FXS phone ports with support for extensive voice features (VMG9823)**
- **FTTH capable with gigabit Ethernet WAN port**
- **5 gigabit Ethernet ports and a USB port**

Benefits

The ZyXEL VMG4825 and VMG9823 residential gateways (RGs) provide ultimate broadband and home connectivity experience by combining the advanced bonded VDSL2 features with carrier-grade, dual-band AC2050 WiFi for the most demanding subscribers. Sophisticated Quality of Service (QoS) for incredible video performance, both wired and wireless, and built-in voice ports (VMG4823) are just a few features that make these RGs an ideal platform for premium services. With over 25 years of experience and extensive industry-wide interoperability, ZyXEL offers carriers solid products with reduced deployment times and lasting subscriber experience.

Bonded VDSL2 with G.Vector

The VMG4825 and VMG9823 support VDSL2 bonding with vectoring up to profile 17a. Vectoring support reduces cross-talk for up to 150% increase in performance and range for operators.

Carrier-class WiFi for Seamless Mobility

The VMG4825 and VMG9823 offers dual-band WiFi with performance boosting features that include Multi-User MIMO (MU-MIMO) and Beamforming for simultaneous, lag-free streaming and gaming. Rated at AC2050, the new RGs deliver speeds of up to 1.7 Gbps* over 5Ghz and 300 Mbps* over 2.4Ghz. High powered WiFi on both 5GHz and 2.4GHz APs extend coverage, unleashing the best wireless experience for homes with growing number of WiFi devices. In addition, the ability to create multiple WiFi networks with up to 4 SSIDs helps operators easily create separate WLAN networks for video, data and guests.

Triple-Play Powerhouse

The VMG4825 and VMG9823 are built with sophisticated QoS, multicast traffic shaping features like IGMP v1/2/3 snooping and VLAN capabilities for premium video delivery service. And built-in Quantenna's 4x4, 802.11ac chip is a top choice among operators for wireless IPTV. In addition operators can easily add voice services with VMG9823's two FXS VoIP ports.

TR-69 Remote Management with TR181 Support

The VMG4825 and VMG9823 support TR69 that simplifies remote configuration, upgrade and management thereby reducing cost and improving customer satisfaction. Additional support for the latest TR-181 data model enhances service provider visibility in to subscriber's LAN network for improved customer support.

* Listed wireless data transfer rates are the theoretical maximum. The actual data transfer rate may vary depending on the network environment

VMG4825:

AC2050 WiFi, Bonded VDSL2 Gateway

VMG9823:

AC2050 WiFi, Bonded VDSL2 Gateway with Voice

Specifications

System Specifications

Wireless

- 5 GHz band
 - 802.11ac support
 - 1.7 Gbps* data rate
 - Backward compatible to 802.11a/n
 - 4x4 antenna array
 - High power amplifier
- 2.4 GHz band
 - 802.11n support
 - 300 Mbps* data rate
 - Backward compatible to 802.11b/g
 - 2x2 antenna array
 - 400mW high power
- WEP data encryption (64/128 bit)
- WPA/WPA2, WPA-PSK/WPA2-PSK (Wi-Fi Protected Access - Pre-Shared Key)
- WPS (Wi-Fi Protected Setup)
- Wi-Fi scheduling
- Multiple SSID (up to 4)

DSL:

- VDSL2 (G.993.2) Bonding
 - 200Mbps/100Mbps* down/up data rates
 - Bonding mode: 8a, 8b, 8c, 8d, 12a, 12b, 17a profiles
 - Single line mode: 8a, 8b, 8c, 8d, 12a, 12b, 17a profiles
 - G.vector (G.993.5)
- ADSL/2/2+ Bonding
 - ADSL (T1.413), G.dmt (G.992.1), G.lite(G.992.2), ADSL2 (G.992.3), ADSL2+ (G.992.5) compliant
 - Reach Extended ADSL2 (Annex L)
 - Annex M (G.992.3 / G.992.5)
 - ATM/PTM transfer mode
- G.INP value support up to INP=16
- PhyR PHY Level Retransmission Technology
- Auto detect for bonding / single line, VDSL2 profile, and ADSL/2/2+ fallback modes

Router/Bridge Features

- IEEE 802.1D transparent bridge & basic spanning tree
- PPPoE (RFC 2516)
- PPPoA (RFC 2364)
- MAC Encapsulation Routing / IPoE
- Network Address Translation (NAT)

- NAT virtual Server (port forwarding)
- DHCP client/server/relay with DHCP option 43/60/61/125
- DNS proxy/dynamic DNS
- Static/Policy Route
- IGMP v1, v2, v3
- IPv6: Dual Stack, 6RD, DS-Lite

QoS

- 802.1Q VLAN tagging/un-tagging
- Support flexible traffic classification

Networking

- IGMP v1/v2/v3
- IGMP snooping
- IGMP fast leave

Management

- Web/HTTP: 3 level log-in
- CLI (Command Line Interpreter) via SSH or Telnet
- Firmware upgrade via Web/TFTP/FTP/TR069 RPC method
- Text based configuration (XML based)
- Configuration backup/update/restore default via Web
- Configurable access control for remote management (Interface and / port number)
- Trust Domain(support trust domain list)
- NTP (Internet Time automatically synchronize)
- DSL Forum TR-069, TR-098, TR064, TR111, TR181
- SNMP v1, v2
- Rom-D support
- UPnP port forwarding rules on page
- Session login.(for multiple user configuration with login privilege.)
- Configuration filter by login privileges

Phone features [VMG9823]

- Caller ID
- Call forwarding (No condition, Busy, No answer)
- Call transferring (Attended and Unattended Call Transfer.)
- Three way conference
- Abbreviated dialing (Speed dial)
- Interactive Voice Response (IVR)
- Flash hook timer
- Message waiting indicator (RFC 3842)

- T.38 fax relay
- Flexible dial plan (RFC3525 section 7.1.14)

Firewall & Security

- Generic packet filter
- DoS attack prevention
- Parental control

Physical Specifications:

- Item dimensions (WxDxH): 59 (W) x 218(D) x 218 (H) mm

Hardware Specifications:

Interface

- WAN: 1 10/100/1000Mbps Ethernet Port
- LAN: 4 x 10/100/1000Mbps Ethernet Ports
- FXS: 2 phone ports [VMG9823]
- Reset: One reset/restore factory default button
- USB
- DSL

LED

- Power/System
- DSL 1-2
- LAN 1-4
- WAN/LAN
- WLAN-2.4G/WPS
- WLAN-5G/WPS
- VoIP 1-2 [VMG9823]
- Internet
- USB

Power supply: 12V/3A

Environmental Specifications:

Operating Environment

- Operating Temp.: 0°C to 40 °C
- Storage Temp.: -30 °C to 70 °C
- Operating Humidity : 10% to 90%, Non-Condensing
- Storage Humidity : 10% to 95%, Non-Condensing

Certification

FCC/IC/CSA

Rear Panel



VMG4825



VMG9823

Application Diagram

