





# Extend Network Reach and Performance in DSL and Fiber Deployments

- VDSL2 / ADSL2+ bonding with vectoring
- Gigabit Combo WAN for FTTH/DSL deployments
- 400mW high power 2.4GHz 802.11n 300Mbps WiFi
- HPNA or MoCA over Coaxial for IPTV connectivity (optional)
- Extreme routing performance for FTTx applications

#### **Benefits**

#### **VDSL2 Channel Bonding with Vectoring**

ZyXEL's VMG4300 Series gateways provide the latest in VDSL2 bonding with vectoring up to profile 17a. Bonding potentially doubles bandwidth over a single copper line and vectoring decreases crosstalk to further increase bandwidth enabling rich multimedia experiences at longer subscriber distances.

#### **Flexible Deployment with Multiple DSL Options**

The VMG4300 Series offers excellent reliability and deployment flexibility with VDSL2 and ADSL2+ fallback as well as PTM/ATM mode support, with full auto-detection selecting the optimal connection type in both bonding and non-bonding network environments.

#### **Gigabit Ethernet Combo WAN / LAN Port**

Intended for fiber deployments, the VMG4300 Series includes a dedicated gigabit Ethernet Combo WAN port with non-blocking routing performance. This enables operators to use a single CPE for both copper and fiber networks and planned migrations. When deployed in a copper network, the gigabit port can be used as a fifth LAN port.

#### **Built-in Coaxial Network Adapter for Multimedia Streaming**

Ideal for provisioning IPTV service, the optional built-in coax adapter provides instant HPNA3.1 (VMG4380 model) or MoCA 1.1 (VMG4381 model) connectivity with set top boxes and other coax-enabled devices in the home network.

#### **Excellent Wireless and Wired Home Connectivity**

The VMG4300 Series features high-powered 400mW wireless 802.11n wireless technology to deliver high speed performance and extended coverage. Wireless data rates can reach 300Mbps\* with stable, reliable wireless connections virtually eliminating dead zones while extending coverage to remote areas throughout the home. Four Gigabit Ethernet LAN ports operate at wire speed for speedy data transfers within the home.

#### Comprehensive Routing with IPv6, TR-069, QoS, and Firewall

ZyXEL engineers excellent routing capabilities designed to meet service provider needs. The VMG4300 Series continues this trend with full IPv4 support, IPv6/IPv4 Dual Stack, and IPv6 Rapid Deployment (RD) for a strong foundation. Upon this foundation, ZyXEL implements advanced features including TR-069 remote management and device configuration, quality of service (QoS) functionality to categorize incoming and outgoing traffic, and a stateful packet inspection (SPI) firewall for end user security.

\* 300Mbps wireless data transfer rate is the theoretical maximum. The actual data transfer rate may vary depending on the network environment.

Wireless N VDSL2 Bonding Combo WAN Gigabit Gateway VMG4325 | VMG4380 | VMG4381



















#### Wireless N VDSL2 Bonding Combo **WAN Gigabit Gateway** VMG4325 | VMG4380 | VMG4381

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### **Specifications**

#### **System Specifications**

#### **DSL**

- VDSL2 (G.993.2) Bonding
  - 200Mbps/100Mbps\* down/up data rates
  - 8a, 8b, 8c, 8d, 12a, 12b, 17a profiles
  - Dual latency
  - 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
- VDSL2 and ADSL/2/2+ over POTS
- · Auto detect for bonding / single line, VDSL2 profile, and ADSL/2/2+ fallback modes

#### WiFi

- 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)
- WDS (Wireless Distribution System)
- Multiple SSID (up to 4)

#### Router

- IPv6
  - · Dual Stack (IPv6 / IPv4)
  - IPv6 Rapid Deployment (6RD)
- DHCP client / server / relay with option 60
- PPPoE / PPPoA / IPoE / IPoA
- DNS server/relay and dynamic DNS
- Network Address/Port Translation (NAT/NAPT)
- Port forwarding and UPnP
- Transparent bridging (802.1d)
- · Static route and policy routing
- RIP I / RIP II
- IGMP v1, v2, v3
- · IGMP proxy and snooping

#### **VLAN & QoS**

- Flexible packet & tag classification
- 6-bit DiffServ Code Point (DSCP)
- 3-bit Class of Service (802.1p CoS)
- 12-bit VLAN ID (802.1q)
- · Priority queuing and scheduling

#### Firewall & Security

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

#### **USB**

- Media server (DLNA) and file sharing (FTP)
- Print server

#### Management

- Web GUI (HTTP/HTTPS)
- Command Line Interpreter (CLI) via Telnet
- TR-069 remote management
- TR-064 local management
- Simple Network Management Protocol (SNMP)
- Connectivity Fault Management (802.1ag CFM)
- Logs and statistics

#### **Hardware Specifications**

#### WAN

- Two RJ-11 DSL over POTS ports
- One RJ-45 Gigabit Ethernet port (software assignable as 5th LAN port)

#### LAN

- Four RJ-45 Gigabit Ethernet ports
- · Wireless interface: One external 2 dBi antenna and one internal 2 dBi antenna
- · Coaxial interface: One F-connector for HPNA 3.1 (VMG4380) or MoCA 1.1 (VMG4381)

#### **USB**

· One standard-A USB 2.0 host connector

#### **Buttons & Switches**

- Recessed reset push button
- WPS config & WLAN on/off push button
- Power on/off switch (VMG4325)

#### **LED Status Indicators**

• POWER, ETHERNET(1-4), ETHERNET WAN, DSL1, DSL2, INTERNET, USB, HPNA (VMG4380), MoCA (VMG4381), WLAN/WPS

#### **Power Supply**

• 120V AC to 12V / 1.5A DC adapter

#### **Physical Specifications**

- Item dimensions (WxDxH): 8.27x6.06x1.57 inches (210x154x40 mm)
- Item weight: 1.09lb (495g)
- Packing dimensions (WxDxH): 10.63x10.04x2.56 inches (270x255x65 mm)
- · Packing weight: 2.41lb (1090g)

#### **Environmental Specifications**

#### **Operating Environment**

- Temperature:  $0^{\circ}$ C ~  $40^{\circ}$ C ( $32^{\circ}$ F ~  $104^{\circ}$ F)
- Humidity: 20% ~ 85% RH (non-condensing)

#### **Storage Environment**

- Temperature: -20°C  $\sim 60$ °C (-4°F  $\sim 140$ °F)
- Humidity: 20% ~ 90% RH (non-condensing)

#### Certification

• FCC Part 15 (Class B)

#### Safety

• UL 60950-1

#### **Product Description**

- VMG4325: Wireless N VDSL2 Bonding Combo **WAN Gigabit Gateway**
- VM4380: Wireless N VDSL2 Bonding Combo WAN Gigabit Gateway with HPNA
- VMG4381: Wireless N VDSL2 Bonding Combo WAN Gigabit Gateway with MoCA

#### **Rear Panel**















