ZYXEL

VMG4005-B50B

VDSL2 17a Bonding and 35b Single Line Bridge Modem/Router

The Zyxel VMG4005-B50B is a VDSL2 pair-bonding modem capable of up to 17a bonding speeds at 200Mbps downstream and 100Mbps upstream as well as profile 35b of up to 300Mbps for single-pair broadband services. Available with the bridge and router modes, the Zyxel VMG4005-B50B VDSL2 pair-bonding modem ensures smooth communications from the central office to remote subscribers over the service provider's existing copper network.

The Zyxel VMG4005-B50B VDSL2 pair-bonding modem extends coverage and enhances performance for exceptional user experiences while service providers can manage and maintain the Internet connections with TR-069 to monitor and manage the modem functions. Subscribers can take advantage of the increased bandwidth for broadband applications like Internet browsing, online gaming, video streaming and Internet voice calling.

- VDSL2 17a Bonding technology allows ISPs to double the speed of their existing customer connection
- VDSL2 supports super vectoring up to profile 35b
- Auto provisioning and remote management through TR-069
- Embedded router/bridge mode
- Remote throughput testing with TR-143

Benefits

CAF II Performance Testing Support

The Zyxel VMG4005-B50B supports optimized TR-143 protocol to facilitate FCC mandated CAF II Performance Testing.

Bonded VDSL2 with G.vector

The VMG4005-B50B supports VDSL2 bonding with vectoring of up to profile 17a and 35b. The vectoring support reduces cross-talk to increase performance and range by up to 150% for operators.
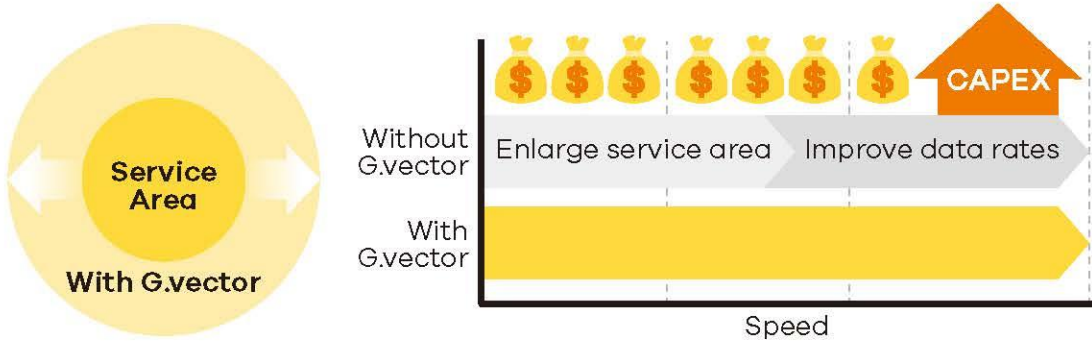
Comprehensive Routing with IPv6, QoS and Firewall

Zyxel offers excellent routing capabilities designed to meet service provider needs. The Zyxel VMG4005-B Series VDSL2 17a Bonding and 35b Single Line Bridge continues this legacy with full IPv4 support, IPv6/IPv4 Dual Stack and IPv6 Rapid Deployment (RD) for a strong foundation to implement advanced features including quality of service (QoS) functionality to categorize incoming and outgoing traffics in addition to a stateful packet inspection (SPI) firewall for end-user security.
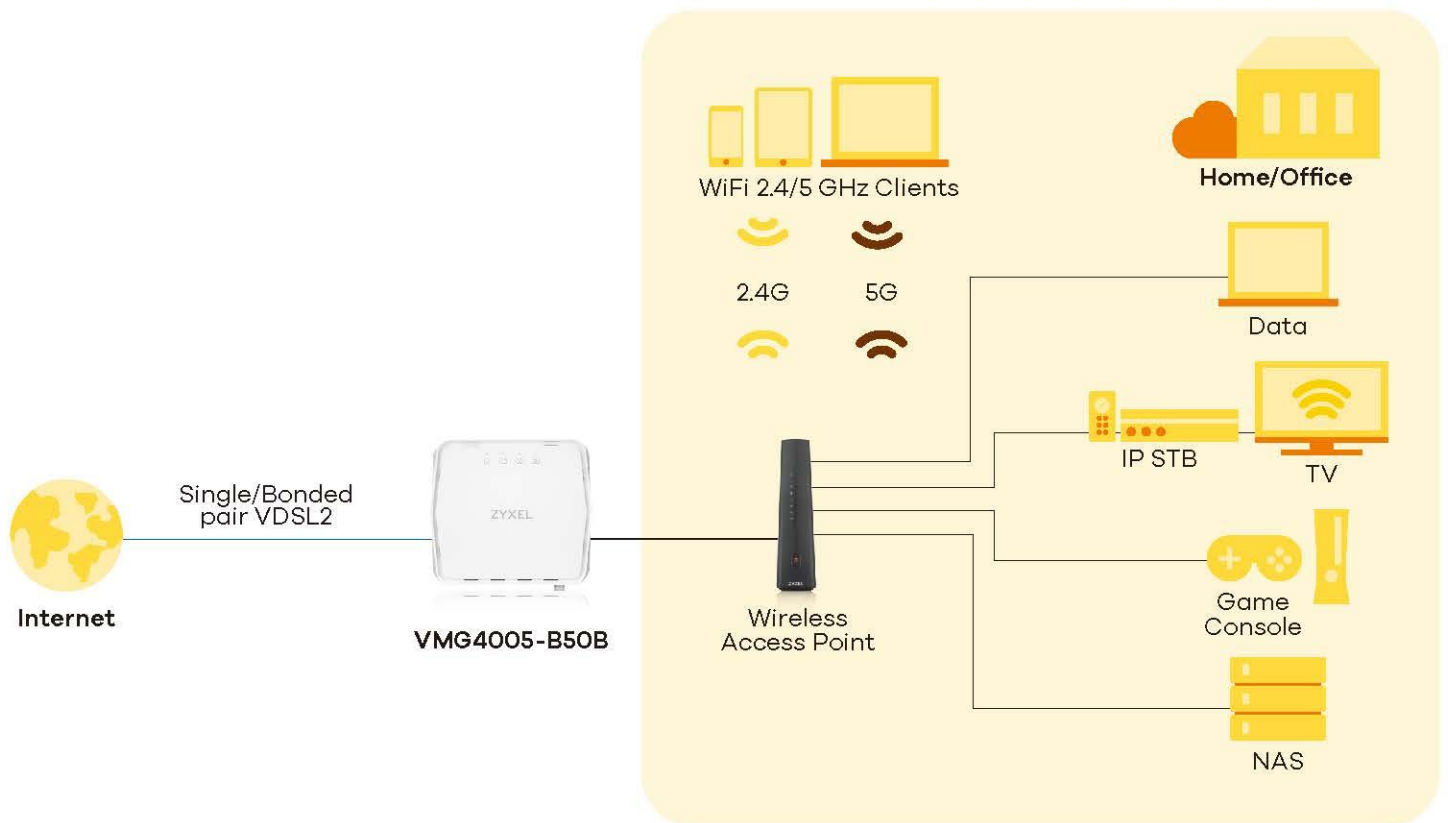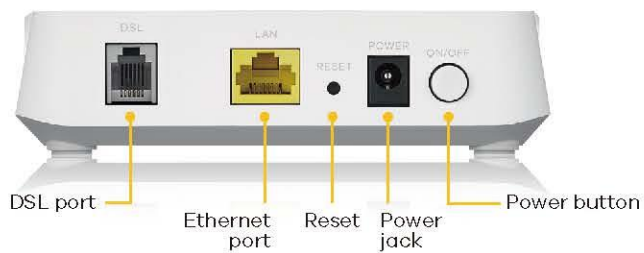

TR-069 remote management

With TR-098/TR-181 data model for TR-069 standard management specifications, service providers are able to manage, configure and diagnose the client devices remotely without manual intervention of subscriber.This unique feature offers a true "plug-and-play" experience and reduces the complexity of deployment, therefore saving operation and maintenance costs for service providers.

Application Diagram

WiFi 2.4/5 GHz Clients

2.4G   5G

Internet

Single/Bonded pair VDSL2

VMG4005-B50B

Wireless Access Point

Home/Office

Data

IP STB

TV

Game Console

NAS

Legend	
—— Ethernet	((WiFi 2.4 GHz
—— DSL	((WiFi 5 GHz

Interface description

DSL port   Ethernet port   Reset   Power jack   Power button

Specifications

System Specifications

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
- IPv4/IPv6

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, TR181
- SNMP v1, v2
- Rom-D support
- Session login.(for multiple user configuration with login privilege.)
- Configuration filter by login privileges

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

VLAN/QoS
- 802.1q VLAN tagging/un-tagging
- Support flexible traffic classification

Hardware Specifications

VDSL:
- G.993.2 VDSL2, Band 997, 998, over POTS
- Support VDSL profiles: 8a/b/c/d, 12a/b, 17a, and 35b
- G.vector

ADSL:
- G.992.1 (G.dmt)
- G.992.2 (G.lite)
- ANSI T1.413 compliant
- G.992.3 (ADSL2)
- G.992.5 (ADSL2+)
- G.INP support

LAN
- One 10/100/1000 Mbps Ethernet RJ-45 ports

LED indicators
- Power
- VDSL#1
- VDSL#2
- LAN

Button
- Power On/Off
- Reset

Power Consumption
- 12 V DC/1 A

Physical Specifications
- Item dimensions (WxDxH): 130 x 120 x 32 mm (5.11" x 4.72" x 1.25")
- Item weight: 173 g (0.38 lb.)
- Packing dimensions (WxDxH): 234 x 140 x 38.5mm (9.21" x 5.51" x 1.51")
- Packing weight: 492 g (1.08 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
- FCC/IC

Package Contents
- VMG4005-B50B
- Power adapter
- Ethernet cable
- Phone cable
- Quick start guide

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Datasheet VMG4005-B50B