ZYXEL
COMMUNICATIONS

VMG3927-B50B

Dual-Band Wireless AC/N VDSL2 Gateway

The Zyxel VMG3927-B50B Dual-Band Wireless AC/N VDSL2 Gateway provides high-speed Internet access to meet the worldwide market requirements for triple-play services. Featuring the built-in 4x4 802.11ac WLAN function that relieves troublesome wirings, the VMG3927-B50B offers extreme coverage for great WiFi user experience. Moreover, the user-oriented design also allows the VMG3927-B50B to meet every customer's own style while providing powerful and practical functions.

Benefits

CAF II Performance Testing Support

The Zyxel VMG3927-B50B supports optimized TR-143 protocol to facilitate FCC mandated CAF II Performance Testing.

Ultra speed for UHD 4K TV services

The Zyxel VMG3927-B50B Dual-Band Wireless AC/N VDSL2 Gateway supports VDSL2 vectoring of up to profile 35b. VDSL2 vectoring reduces cross-talk to increase broadband access performance, which further enables operators to offer better UHD 4k IPTV services.

- VDSL2 supports vectoring up to profile 35b

- AC2300, dual-band WiFi with 1.7 Gbps* 802.11ac 4x4 Wave 2 technology

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

- Excellent routing and QoS capability to prioritize applications as needed

- NAT, firewall with SPI and DoS for better security

- Stand-alone and wall mountable

- 1 GHz dual-core processor with dedicated quad-core routing accelerator

MULTY

Carrier-class WiFi for seamless mobility

Rated as AC2300, the Zyxel VMG3927-B50B delivers speeds of up to 1.7 Gbps* over 5 GHz and 450 Mbps* over 2.4 GHz. For better user experience, the VMG3927-B50B offers dual-band WiFi with performance-boosting features such as Multi-User MIMO (MU-MIMO) and Beamforming for simultaneous, lag-free streaming and gaming experiences. In addition, its ability to create multiple WiFi networks with up to 4 SSIDs helps operators to easily create individual WLAN networks for video, data and guests.

TR-069 remote management with TR-181 issue-2 support

The Zyxel VMG3927-B50B supports TR-69 that simplifies remote configuration, upgrade and management and therefore improves cost effectiveness and customer satisfaction. Additional support to the latest TR-181 issue-2 data model also enhances service providers' visibility on subscriber LAN networks for improved customer assistance.
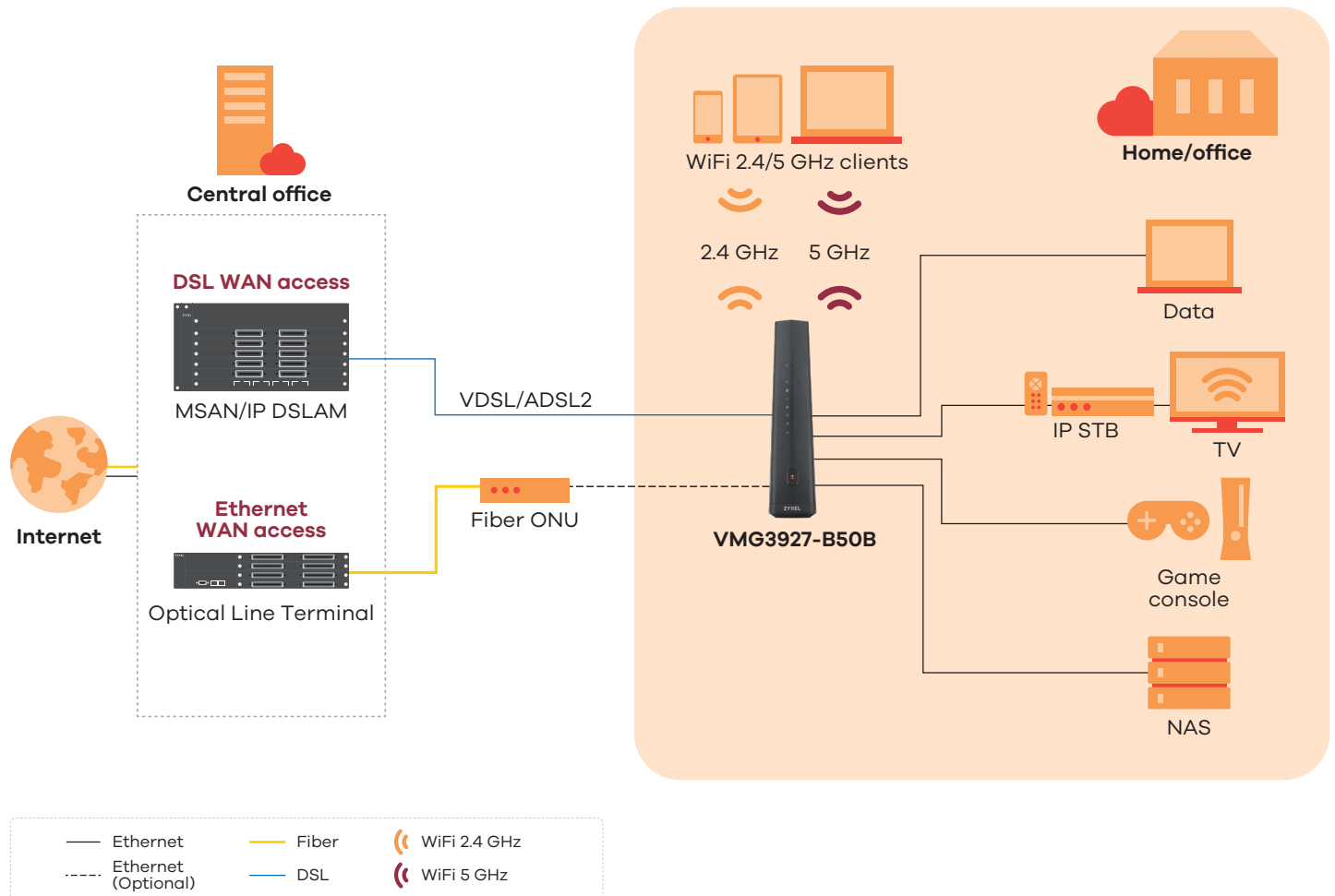
Connected, anywhere at home

Zyxel's Multy Pro mobile app is a simple, effective utility to help customers setup, adjust and check their home networks. Combining network discovery, easy setup and diagnostics for devices connected to the home network, it also allows service providers to effectively analyze network issues for customers if needed. The Zyxel Multy Pro app gives the best experience while reducing home support costs and service calls by relieving customers' troubles remotely.

The triple-play powerhouse

The Zyxel VMG3927-B50B is built with sophisticated QoS and multicast traffic shaping features like IGMP v1/2/3 snooping and VLAN capabilities for premium video delivery services. To wireless IPTV operators, its built-in 4x4, 802.11ac chip is the top choice.

Application diagram

Central office

DSL WAN access
MSAN/IP DSLAM

Ethernet WAN access
Optical Line Terminal

Internet

VDSL/ADSL2

Fiber ONU

WiFi 2.4/5 GHz clients
2.4 GHz   5 GHz

VMG3927-B50B

Home/office

Data

IP STB

TV

Game console

NAS

	Ethernet		Fiber	WiFi 2.4 GHz
	Ethernet (Optional)		DSL	WiFi 5 GHz

Specifications

System specifications

Wireless standard
- IEEE 802.11 b/g/n 2.4 GHz
- IEEE 802.11 a/n/ac 5 GHz

Wireless transfer rates
- Transmit:
  - 802.11ax (2.4 GHz): up to 450 Mbps
  - 802.11ax (5 GHz): up to 1733 Mbps

VDSL and ADSL compliance
- VDSL:
  - G.993.1 VDSL
  - G.993.2 VDSL2, band 997, 998, Over POTS
  - Support VDSL profiles: 8a/b/c/d, 12a/b, 17a, 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

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

Wireless
- Wireless Protected Setup (WPS)
- WMM
- WPA2-PSK AES
- Security type
- Multi SSID: up to 4
- MU-MIMO support

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

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

Management
- Web/HTTP: 3 level log-in via SSH or Telnet
- Firmware upgrade via Web/TFTP/FTP/TR-069 RPC method
- Text based configuration
- Configuration backup/update/restore default via Web
- Configurable access control for remote management (interface and/port number)
- DSL forum TR-069, TR-098, TR-181
- TR-111 and TR-181 i2
- SNMP v1, v2
- Rom-D support
- UPnP port forwarding rules on page

Hardware specifications

DSL WAN
- One RJ-11 DSL port

WAN
- One 1GbE RJ-45 port

LAN
- Four 1GbE RJ-45 ports

Wireless
- 2.4 GHz: 3x3 MIMO antenna array
- 5 GHz: 4x4 MIMO antenna array

USB
- One USB 2.0 host

Processor
- 1 GHz dual-core ARM based processor plus additional offload engines and dedicated quad-core routing accelerator

Button
- One reset button
- One WPS on/off button

Status LEDs Indicators
- Power
- DSL
- WAN
- Internet
- LAN
- USB
- WLAN-2.4G/WPS
- WLAN-5G/WPS

Power consumption
- 12 V DC/2.0 A

Physical specifications
- Item dimensions (WxDxH): 175 x 60 x 245 mm (6.88″ x 2.36″ x 9.64″)
- Item weight: 546 g (1.20 lb.)
- Packing dimensions (WxDxH): 345 x 232 x 65 mm (13.58″ x 9.13″ x 2.55″)
- Packing weight: 995 g (2.19 lb.)

Environmental specifications

Operating environment
- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 20 to 95% RH

Storage environment
- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 20 to 95% RH

Certification
- EMC: FCC, IC

Package contents
- Wireless gateway
- Power adapter
- Ethernet cable
- RJ-11 cable
- Quick Start Guide

* The maximum wireless data 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.

Interface description

WPS button

Power jack

Reset button

GbE WAN port

GbE LAN ports

USB port

DSL port

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Datasheet VMG3927-B50B