

# ZYXEL



## VMG8823-B Series

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

### A single gateway for all services

The Zyxel VMG8823-B Series Dual-Band Wireless AC/N VDSL2 VoIP Combo WAN IAD gives you all the benefits of 802.11ac Wave 2 technology and a simple way to extend WiFi networks in the home.

### Meeting the needs of all users...

Zyxel's VMG8823-B Series is a high-performance, dual-band, wireless gateway that provides an excellent performance and makes it very easy to extend and manage home wireless networks.

It meets the needs of all customers – for simple web browsing and social media, and bandwidth-intensive entertainment. It delivers excellent wireless coverage and performance, easy ways to extend the network and comes with a management app that puts users in control of access.

### ...and service providers

For service providers, there are additional benefits. The Zyxel VMG8823-B Series supports both VDSL/ADSL and fiber connections, so to can be used as a gateway for all your services. Remote management capability makes it is easy to support, so you can offer a better service to customers.

### Even more with Multy Pro

With the Zyxel Multy Pro Managed WiFi Solution enabled, the VMG8823-B Series provides a secure, affordable, and reliable premium WiFi experience, delivering trouble-free connectivity throughout subscriber homes.



Next generation 802.11ac Wave 2 technology with MU-MIMO



Designed using Zyxel's WiFi excellence program



Airtime fairness for improved data rates



Zyxel Multy Pro Solution delivers managed whole-home mesh WiFi



AP steering provides coverage for entire home WiFi network



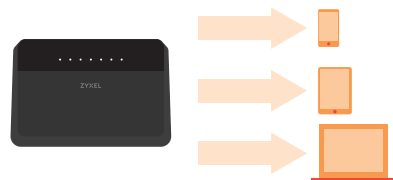
Management app gives users an easy way to add guest SSIDs and control usage

## Benefits

### Fine-tuned to deliver WiFi excellence

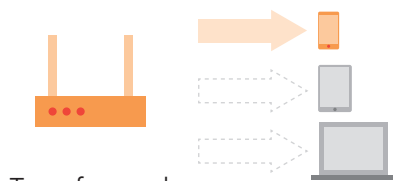
The Zyxel VMG8823-B Series gateway delivers the very best next-generation 802.11ac Wave 2 WiFi technology and has been developed using Zyxel's WiFi Excellence Program. We select the best components, fine-tune our product design and conduct rigorous testing and benchmarking to ensure optimum wireless performance.

#### MU-MIMO



Transfer at the same time

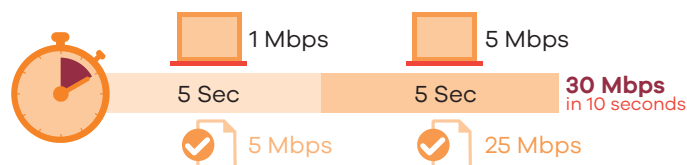
#### SU-MIMO



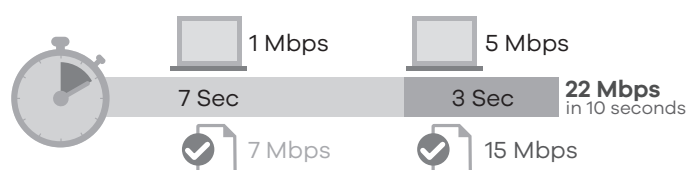
Transfer one by one

We have taken full advantage of Wave 2 features, such as MU-MIMO and airtime fairness to ensure excellent WiFi speeds and coverage. And while it has a 4x4 802.11ac configuration and supports multiple SSIDs, the Zyxel VMG8823-B Series also offers intelligent band steering to ensure users always have the best wireless connection.

#### With Airtime Fairness



#### Without Airtime Fairness



### Easily extend and manage WiFi with Multy Pro

Auto-configuration means simple, zero-touch installation of supported WiFi extenders and access points. In addition, remote management and diagnostics are fully supported, making life easier for both the customer and the service provider.

Access point steering is supported too, so users can still be sure of getting the best connection right across their extended wireless coverage area.

The Zyxel VMG8823-B series plays a key role in the Multy Pro Managed WiFi Solution. The Multy Pro is an advanced, integrated WiFi solution comprising broadband gateways, wireless extenders, software, and a mobile app. Together they provide subscribers with high-performance, wall-to-wall mesh WiFi connectivity.

The Zyxel Multy Pro Solution streamlines wireless networking with auto-configuration, WiFi range extension, band steering, and seamless client roaming, along with other advances. Additionally, subscribers can utilize the Multy Pro app to quick-check WiFi network status, change passwords, and easily set up QR-coded guest access.

The Zyxel Multy Pro Solution not only provides whole-home mesh WiFi coverage for complete subscriber satisfaction, the solution allows service providers to take advantage of TR-069 and TR-181 remote management. This helps to reduce support calls and costs with premium services, keeping customers happy while reducing churn rate.



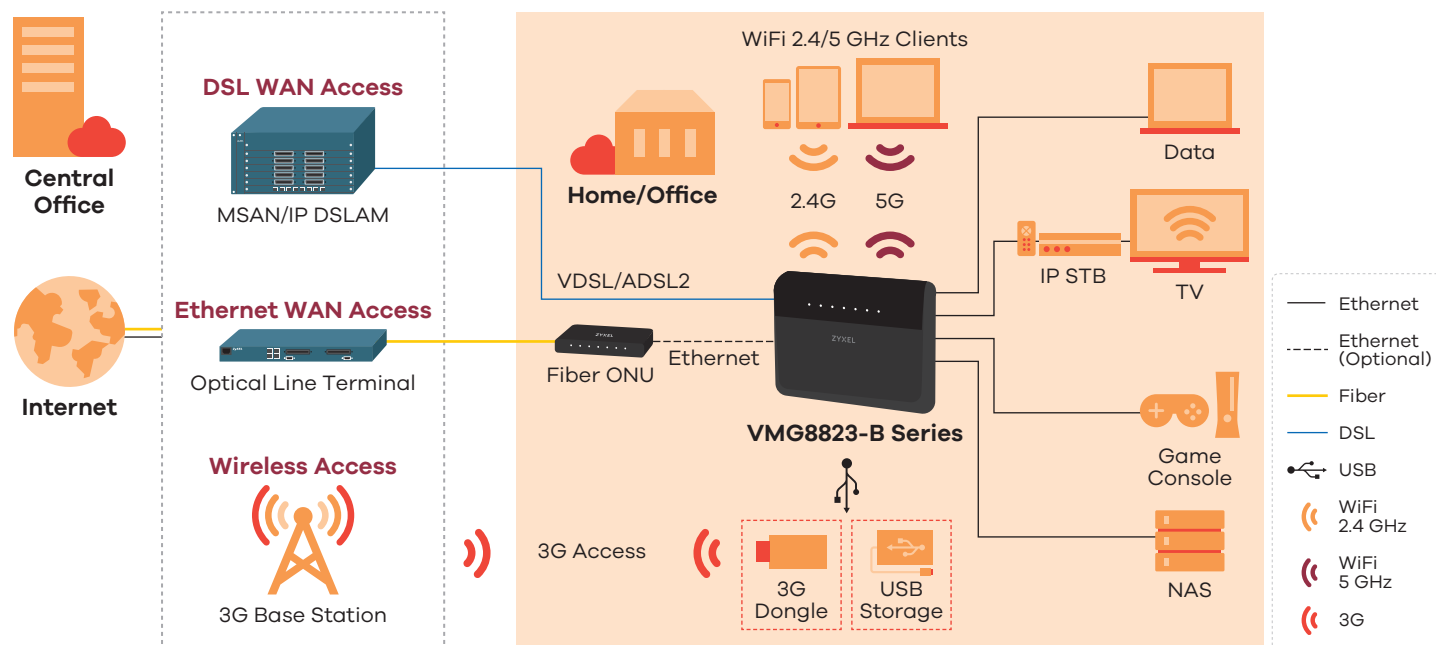
## One box for all your connectivity options

The Zyxel VMG8823-B Series comes with connectivity for ADSL/VDSL and fiber connections, so you only need one gateway to meet the needs of all your customers. As well

as being efficient and economical, this cuts down on logistics and means you can support all the services you offer with a single device.



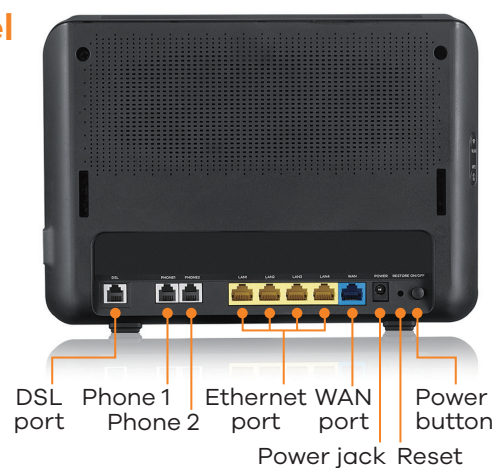
## Application Diagram



## Front Panel



## Rear Panel





# Specifications

## System Specifications

### Wireless Standard

- 802.11 b/g/n 2.4 GHz
- 802.11 a/n/ac 5 GHz

### VDSL and ADSL Compliance

- VDSL:
  - G.993.1 VDSL
  - G.993.2 VDSL2, band 997, 998, over POTS or ISDN
  - VMG8823-B50B/B60B: 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

### 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
- WEP data encryption 64/128 bit
- WPA2/WPA2-PSK with TKIP & 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

### USB

- File sharing
- 3G dongle

### Management

- Web/HTTP: 2 level log-in
- Command Line Interpreter (CLI) 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-111 and TR-181 i2
- SNMP v1, v2
- Rom-D support
- UPnP port forwarding rules on page

### VoIP

- Session Initiating Protocol (SIP), RFC 3261
- Codec: G.711 a/μ (64K), G.726 (24/32K), G.722, G.729 (Optional)
- G.168 echo cancellation (8 ms - 16 ms)
- Fax/modem detection and pass-through
- Voice Active Detector (VAD)
- Dynamic jitter buffer
- DTMF detection and generation
- DTMF relay by in-band and out-of-band (RFC 2833, SIP INFO)
- SIP account (URL type included)
- On hook, off hook and flash detection
- Caller ID
- Call forwarding (No condition, busy, no answer)
- Call transferring
- Call hold/Call retrieve
- Three way conference
- Call waiting

## Hardware Specifications

- WAN:
  - VMG8823-50B: One RJ-11 port for VDSL (over POTS)
  - VMG8823-60B: One RJ-45 port for VDSL (over ISDN)
- Wireless:
  - Two internal antennas (2.4 GHz)
  - Four internal antennas (5 GHz)

- DSL:
  - VMG8823-B50B: One RJ-11
  - VMG8823-B60B: One RJ-45
- Ethernet:
  - Four 10/100/1000 Mbps
  - Ethernet ports RJ-45
- VoIP: 2 FXS ports
- USB: One USB 3.0 host
- Button:
  - One reset button
  - One WPS on/off push button
- Status LEDs indicators:
  - Power
  - DSL
  - Internet
  - WAN (ETH)
  - LAN 1 - 4
  - WLAN-2.4G/WPS
  - WLAN-5G/WPS
  - Phone 1
  - Phone 2
  - USB
- Power: 12V DC, 2.5A

## Physical Specifications

- Item dimensions (WxDxH): 253.97 x 184 x 35 mm (9.99" x 7.24" x 1.37")
- Item weight: 549 g (1.21 lb.)

## Environmental Specifications

### Operating Environment

- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 90% RH (Non-condensing)

### Storage Environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 0% to 95% RH (Non-condensing)

## Certification

- CE

## Package Contents

- Wireless IAD
- Power adapter
- Ethernet cable
- Phone cable
- Quick start guide

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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Datasheet VMG8823-B Series



5-100-01317014 09/17