





VMG1312-T20B

Wireless N VDSL2 Gateway with USB

The Zyxel VMG1312-T20B Wireless N VDSL2 Gateway with USB provides autosensing between VDSL2 and ADSL2+ for high-speed Internet access. Supported with G.vectoring, the VMG1312-T20B increases speed and coverage to compete with other broadband technologies without infrastructural changes.



VDSL2 vectoring for maximized service coverage

The Zyxel VMG1312-T20B supports G.vectoring to eliminate crosstalk or interference among VDSL lines. G.vectoring significantly increases bit rates to compete with cable/fiber technologies as well as to enlarge service coverage without changing the current infrastructure, offering a CAPEX-efficient way to significantly save costs comparing to fiber-to-the-home (FTTH) deployments.

2.4 GHz 11n (2x2) for guaranteed performance and coverage

Supporting 802.11n technology, the Zyxel VMG1312-T20B provides wireless data rates of up to 300Mbps with eliminated dead zones and extended coverage while retaining backward compatibility.



VDSL2 G.vectoring for maximized service coverage



Comprehensive QoS enhanced triple-play experience



Remote management via TR-069 and TR-181 i2

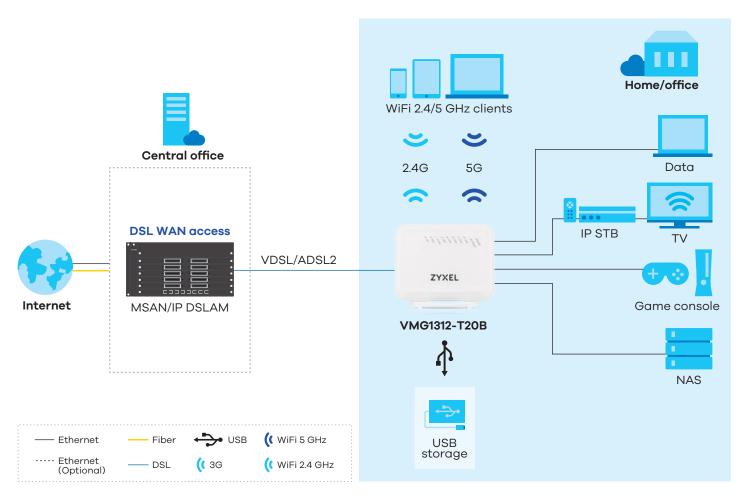
Quality of Service (QoS) support

With QoS features, service providers can customized QoS policies and prioritize the mission-critical services such as IPTV and VoIP based on their service plan offerings. This increases network efficiency and productivity that enable service providers to offer a real multi-play solution meeting the needs of residential users.

Remote management via TR-069 and TR-181 issue-2

Supporting TR-069 for simplified remote configuration, firmware upgrades, diagnosis and TR-181 issue-2 for enhanced visibility on the LAN network, the Zyxel VMG1312-T20B enables superior customer service with the minimized OPEX.

Application diagram



Specifications

System specifications

Wireless standards

• 2.4GHz 802.11n (2x2) 300Mbps

VDSL and ADSL compliance

- VDSL:
 - ITU-T G.993.2 VDSL2, band plan 997, 998
 - VDSL profiles (8a/b/c/d, 12a/b, 17a)
- ITU-T G.993.5 (G.vector)
- ITU-T G.998.4 (G.inp): up to 16 symbols
- TR-114
- ADSL:
 - ITU-T G.992.1 (G.dmt) Annex A
- ITU-T G.992.2 (G.lite) Annex A
- ANSI T1.413
- ITU-T G.992.3 ADSL2
- ITU-T G.992.5 ADSL2+
- ITU-T G.998.4 (G.inp)
- Reach-Extended ADSL (RE ADSL)

Router/bridge features

- PPPoE (RFC2516)
- PPPoA (RFC2364)
- DHCP client/server/relay
- DHCP option 60/61/125
- DNS Proxy/Static DNS/DNS From ISP
- NAT (Enable/disable)
- Fullcone NAT (Enable/disable)
- IGMP Proxy (Enable/disable)
- IGMP v1, v2
- IEEE 802.1d transparent bridge
- NAT server (Port forwarding)
- Static route/policy routing
- IP protocol (IPv4/IPv6)

Wireless

- IEEE 802.11 b/g/n compliance
- Frequency: 2.4 GHz
- Data rate: 300 Mbps
- WPA/WPA2
- WPA2-PSK with AES
- WPA/WPA2-PSK with AES/TKIP+AES
- WEP data encryption 64/128 bit
- Wireless Protected Setup (WPS)
- Multi SSID (up to 4) and hidden SSID support

VLAN/QoS

- VLAN Active (Enable/disable)/802.1p (0~7)/802.1q (1~4094)
- Supports flexible traffic classification
- TCP / UDP port range
- Ether type (NA/IP/ARP/PPPoE discovery/PPPoE session/802.1Q/ IPv6)

- Source & destination address/subnet mask/port range/MAC/MAC mask
- Predefine service
- IP protocol (TCP/UDP/ICMP/IGMP/ User defined)
- DHCP OPT (60/61/77/125)
- Packet length
- 6-bit DiffServ Code Point (DSCP, RFC 2474)
- TCP ACK

USB

• File sharing

Firewall & security

- MAC filter
- Scheduler rule
- IPv4/IPv6 firewall (Stateful Packet Inspection)
- Parental control.
- Supports ACL rule (32 ACL rules)
- DoS protection

Management

- Web/HTTP: 3 level log-in
- Login privilege
- 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
- DSL Forum TR-069, TR-098, TR-181 issue-2, TR-064, TR-111
- SNMP v1, v2
- Supports Rom-D
- TR-069 serial number parameter MUST be device serial number in back label.

Hardware specifications

WAN

 One RJ-11 interface for VDSL/ADSL2 (over POTS)

LAN

• Four 10/100Mbps Ethernet LAN ports

Wireles

- Two on-board antennas
- One USB2.0 host

Status LED indicator

- Power, Ethernet, WLAN, WPS, DSL, Internet, USB
- Power on/off button

WLAN/WPS button

- One button for WLAN on/off
- One button for WPS configuration

Reset/restore button

One real button for restore factory default settings

Power consumption

- 12 V DC, 1 A
- 12 Watt max

Physical specifications

- Item dimensions (WxDxH):14.5 x 60.6 x 120.7 mm (?" x ?" x ?")
- Item weight: 0.19 g (? Ib.)
- Packing dimensions (WxDxH):
 182 x 134 x 79 mm (?" x ?" x ?")
- Packing weight: 435 g (? lb.)

Environment 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°)
- Humidity:

10% to 95% (Non-condensing)

Certification

• CE

Package contents

- Wireless router
- Power adapter
- RJ-11 cable
- RJ-45 cableQuick Start Guide

Hardware interface

