ZYXEL

VMG5301-T20A

Wireless N VDSL IAD

The VMG5301-T20A provides high-speed VDSL Internet access to meet the worldwide market requirements of triple-play services. It supports 802.11n which provides the ultimate solution for high speed wireless connection with data rate up to 300 Mbps and further improves your wireless experience by offering better whole home coverage and avoiding dead spots. Furthermore, The VMG5301-T20A supports IPv6 which allows for much more efficient routing and a larger address space.

Benefit

VDSL with G.Vector
VMG5301-T20A supports VDSL with vectoring up to profile 30a. Vectoring support reduces cross-talk to increase in performance and range for operators.

VoIP 1FXS ports
Built-in VoIP 1 FXS ports with RJ11 interface. It benefits end user to use traditional phone set to go over VoIP SIP network. End user can reduce phone bill dramatically as comparing to traditional PSTN network. In addition, using VoIP, it supports variety of call complementary service including call hold, call forward, 3-way conference call, ... etc.

IPv6 - Next Generation Internet Routing
The VMG5301-T20A supports IPv6 - the successor to the current IPv4 addressing system that has been used since the Internet was first created. IPv4 address space is full up and IPv6 allows for much more efficient routing and a larger address space. IPv6 is supported both from your own ISP, but if your ISP does not (yet) support IPv6, VMG5301-T20A also supports IPv6 broker/tunnel services to provide IPv6 access to 3rd party IPv6 providers.

- VDSL2 support up to profile 30a

- 2.4GHz 11n (2X2) for superior performance and coverage

- Support VoIP SIP protocol with 3-way conference call

- TR-069 remote device management

- Excellent routing and QoS capability to offer high performance service of video, internet access, BT

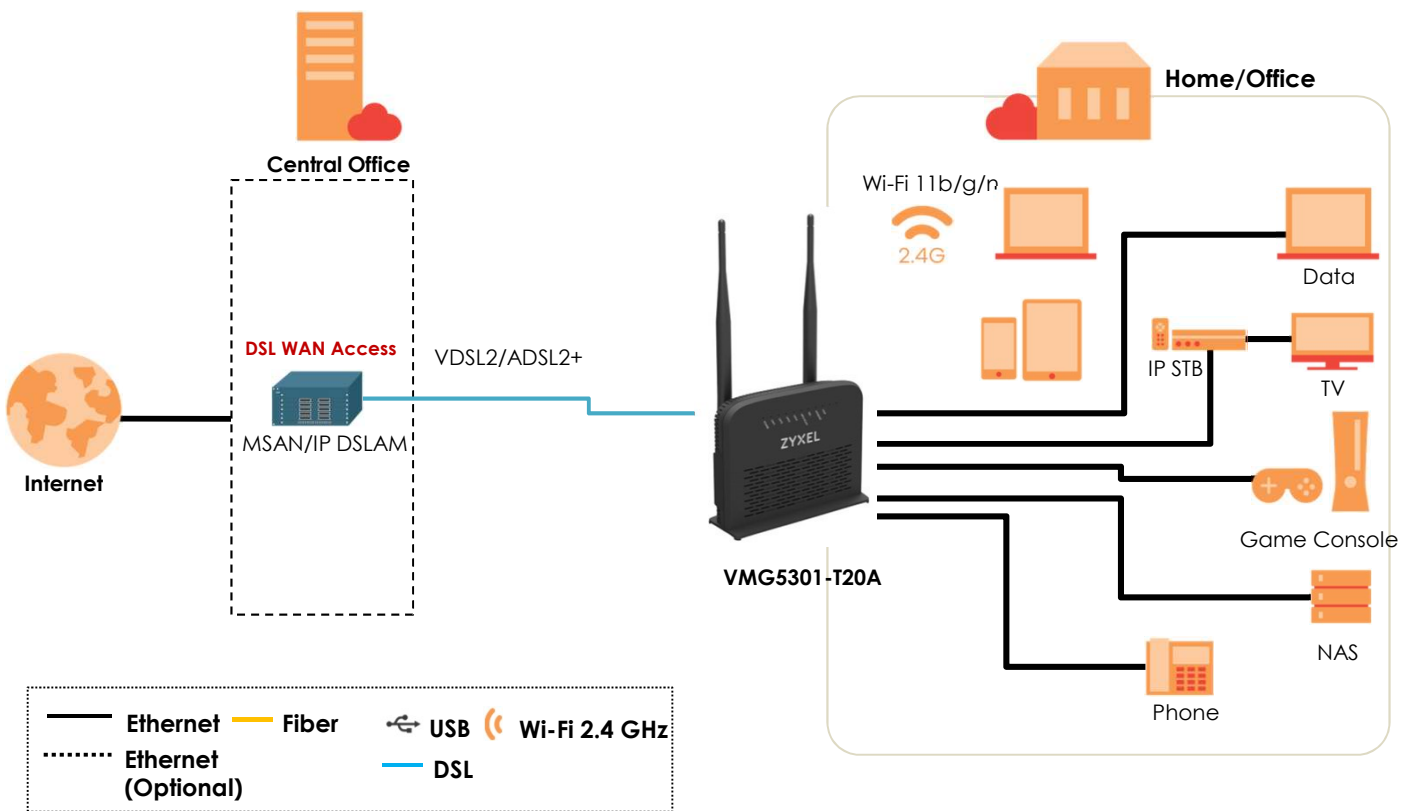- Security NAT, firewall with SPI and DoS to resist the hacker attack

Triple-Play Powerhouse

The product builds with sophisticated QoS, multicast traffic shaping features like IGMP v1/2/3 snooping and VLAN capabilities for premium video delivery service.

TR-069 Remote Management with TR-098 supported

The product supports TR-69 that simplifies remote configuration, upgrade and management thereby reducing cost and improving customer satisfaction. Additional support for the latest TR-098 standard data model enhances service provider visibility in to subscriber's LAN network for improved customer support.

Applications Diagram

Specifications

System Specifications
Wireless Standard
• 802.11 b/g/n 2.4 GHz
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 and 17a, 30a
 - 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 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
Management
• Web/HTTP: 2 level log-in
• CLI (Command Line Interpreter)
• 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
• SNMP v1, v2
VoIP
• SIP (Section Initiating Protocol, RFC 3261)
• Codec: G.711 a/μ (64K), G.726 (24/32K), G.722
• G.168 echo cancellation (8ms ~ 16ms)
• Fax/modem detection and pass-through (G.711/T.38)
• Voice Active Detector (VAD) (Silence Suppression, Comfort Noise Generation (CNG))
• 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 (Attended, Unattended)
• Call Hold / Call Retrieve
• Three Way Conference (local mixer)
• Call Waiting

Specifications

Rear Panel

Hardware Specifications
• One RJ-11 VDSL port
• Four 10/100 Mbps Ethernet LAN RJ-45 ports
• WLAN: two external antenna
• WLAN/WPS button: separate WLAN/WPS button
• FXS*1
• Reset/Restore button:
• Status LED indicator:
    DSL
    WIFI
    Ethernet
    Internet
    Power

Power Consumption
12 V DC

Environmental Specifications
Temperature:
Operating: 0℃ to 40℃
Storage: -30℃ to 60℃
Humidity:
Operating Humidity: 20 to 95% RH, Non-condensing
Storage Humidity: 20 to 95% RH, Non-condensing
Certification
• CE

Package Contents
• Wireless IAD
• Power adapter
• Ethernet cable
• RJ11 cable
• Quick start guide
• Warranty card

Datasheet VMG5301-T20A