

PMG5317-T20B

Wireless N GPON HGU with 4-port GbE Switch

The Zyxel PMG5317-T20B, a 4-port Wireless N GPON Home Gateway Unit (HGU), is fully compliant with ITU-T G.984 and wireless IEEE 802.11n environments to provide ultra-high speed fiber access along with four GbE LAN downlink, two VoIP ports, one USB port and 2x2 11n WLAN.

Apart from providing high-speed Gigabit data transmission, the Zyxel PMG5317-T20B also comes with advanced QoS, security and enriched multicast feature sets to ensure the quality of Triple-play (Data/Voice/Video) services.

The in-house developed OPAL software realizes modulation of upper-layer applications and makes the Zyxel PMG5317-T20B more powerful for delivering customized software features. Furthermore, to better extend WiFi coverage and to eliminate possible dead zones, the Zyxel PMG5317-T20B optimizes its hardware design to provide stable, reliable wireless connections for high-speed data and multimedia applications that ensures a superior WiFi user experience.



Integrated Internet services through fiber optics



Zyxel OPAL realizes modulation of the CPE feature set



802.11n WLAN for superior performance and coverage



Provisioning and management through TR-069 along with OMC1

Benefits

Unlimited possibility with GPON Fiber

Internet evolves rapidly as more and more services and applications keep on their pace of innovation. With continuous growth of smart homes, high-definition TV, Virtual Reality and Augmented Reality, the need for more transmission speed is growing quickly as well. To meet the bandwidth demand, GPON is an essential technology to help Service Providers satisfying bandwidth demands not only for now, but also for the future. With one-time investment on fiber, Service Providers can deploy an all-IP-based and future-proof network with lower management cost.

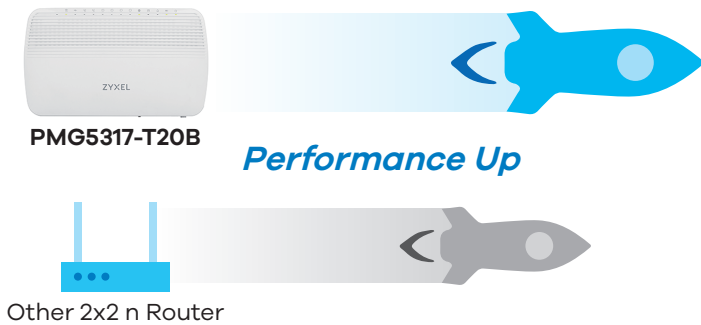


Superior coverage with unique wireless circuit design

As more home devices are introduced, wireless LAN is becoming the key for resident connectivity and the major factor for service providers to differentiate their services.

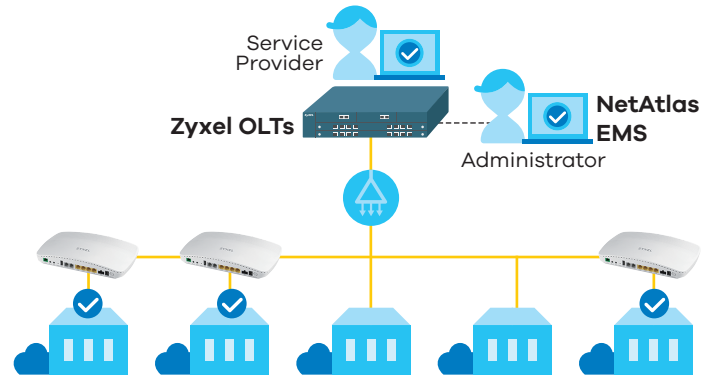
Leveraging the expertise from Zyxel's professional wireless AP, the PMG5317 Series come with a unique wireless circuit design that helps boosting signal quality while maintaining good receiver sensitivity on the wireless circuit.

It greatly reduces the dead zone in homes and help Service Providers to achieve better customer satisfaction.



Lower OPEX with Zyxel OMCI & APS

The Zyxel PMG 5317-T20B Wireless N GPON HGU with 4-port GbE Switch is equipped with the Zyxel-specific OMCI parameter that works perfectly with Zyxel's EMS and OLT system. With the E2E-capable parameters, Zyxel provides not only the standard parameters defined by OMCI but also some specific parameters that help service providers to diagnose, operate and manage their fiber networks. Together with the Zyxel E2E EMS & OLT system, Zyxel ONT supports unique auto-provisioning that helps service providers to easily provision the WAN configuration and VoIP configuration without having to send technicians to the field for configuration setups.



Zyxel OPAL firmware realizes the flexibility and faster time to market

By adopting same OPAL firmware trunk applied in Zyxel CPE, the PMG5317-T20B inherits a rich, field-proven feature set such as TR069, VoIP and more. Service providers can now expect the same user experience when they migrate from the original DSL CPE to Fiber devices. Furthermore, the lab qualification time can be greatly reduced by using the same OPAL firmware trunk.

CPE is pivotal for many service providers to provision value-added services while more and more applications are coming to home and business environments. As a flexible, future-proof software platform is needed, OPAL, a modular software architecture and open framework, provides the flexibility for easy feature tailoring to assure all the application requests can be covered.



Specifications

System Specifications

GPON Compliance

- Comply ITU-T G.984.1/G.984.2/G.984.3/ G.984.4/G.988 GPON standard
- Comply with class B+ type PMD
- DS/US speed: 2.488/1.244 Gbps
- Wavelength: 1490 nm (DS) & 1310 nm (US)
- Physical distance reach to 20 km
- DBA
- Configurable AES DS and FEC DS/US
- GEM supports Ethernet packet
- GEM SAR
- Support up to 8 T-CONs each with priority queues (US)

Ethernet (LAN) Features

- Full duplex IEEE 802.3x
- MAC address learning
- IPv6 address transparent

Networking Features

- IEEE 802.1D Transparent bridge
- IPv4 NAT/Routing
- Static Routing, Dynamic Routing (RIP)
- IPv6 with IPv6 routing
- IPv6 DualStack/DS-Lite
- NAT/NAPT
- Port forwarding
- PPPoE client
- DHCP client/server
- ALG (SIP, RTSP), UPnP
- DDNS/DNS server/DNS client

VLAN Functional Specifications

- VLAN IEEE 802.1Q
- CoS IEEE 802.1p
- QinQ VLAN

QoS

- 802.1p priority
- SP/WRR/SP+WRR
- Broadcast storm control

WLAN

- Wireless Protected Setup (WPS)
- WEP data encryption (64/128 bit)
- WPA-PSK/WPA2-PSK (WiFi protected access)
- Multiple SSID (up to 4)

Security

- Static Packet Inspection (SPI) firewall
- MAC/IP/URL addresses filtering

VoIP

- Voice functionality:
 - Codec: G.711 a/u, G.722, G.726
 - DTMF tone: detection and generation
- Phone features:
 - Internal call
 - T.30/T.38/G.711 fax mode call waiting
 - Call forwarding (No condition, busy, no answer)
 - Call transferring (Blind, ConsultOnHold, Attendant)
 - Call hold/call retrieve
 - Three-way conference
 - Second call/adding an outgoing call
 - Switch between 2 active calls

Management

- WEB/TELNET (CLI)
- OMCI (G.984.4)/TR069
- Firmware upgrade via FTP/TFTP/ HTTP
- Support Zyxel auto-provisioning

USB

- File sharing

Hardware Specifications

- WAN/PON: One Giga optical interface (SC/APC)
- Phone: Two FXS RJ-11 ports
- LAN: Four 10/100/1000 Mbps Ethernet RJ-45 ports
- UPS: Power input: DC 12V, 8 pin connector
- USB: One USB 2.0 hosts
- WLAN button: WiFi on/off switch
- WPS button: A tact switch
- Reset: A tact switch. One reset/ restore factory default button
- Power button: Power on/off switch (2-stage lockable pushbutton)
- LED indicators:
 - Power
 - Battery
 - Alarm
 - PON
 - Internet
 - LAN 1-4
 - Phone 1-2
 - USB
 - WLAN/WPS
- Power supply: DC 12V/1.5A
- Power consumption: 15.75 Watt max.

Physical Specifications

- Item dimensions (WxDxH): 243.3 x 141.7 x 42.9 mm (9.57" x 5.57" x 1.68")
- Item weight: 388g (0.86 lb.)
- Packing dimensions (WxDxH): 292 x 202 x 74 mm (11.49" x 7.95" x 2.91")
- Packing weight: 796g (1.75 lb.)

Environmental Specifications

Operating Environment

- Temperature: 0°C to 45°C (32°F to 113°F)
- Humidity: 10% to 90% RH (Non-condensing)

Storage Environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 95% RH (Non-condensing)

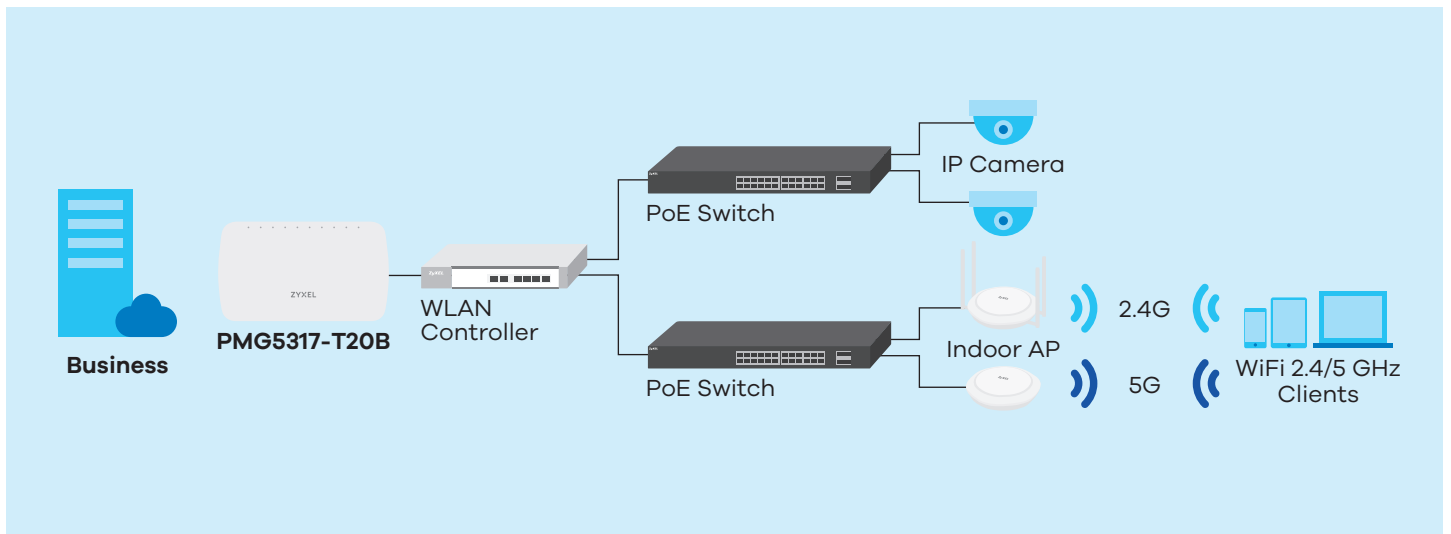
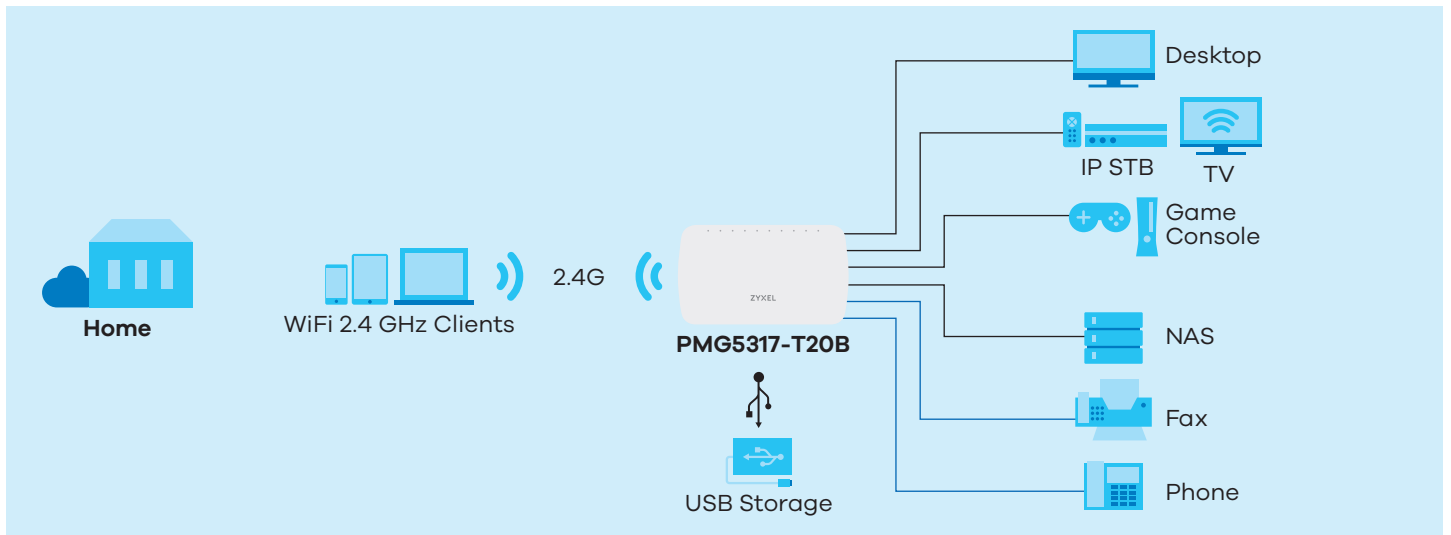
Certification

- EMC: CE
- Safety: CE LVD
- Energy Saving: CE ErP

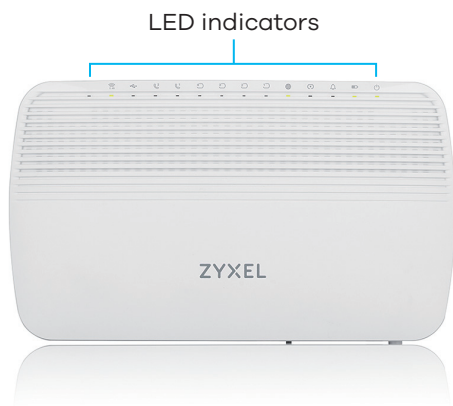
Package Contents

- GPON HGU
- Power adapter
- Ethernet cable
- RJ-11 cable
- Quick start guide
- Warranty card

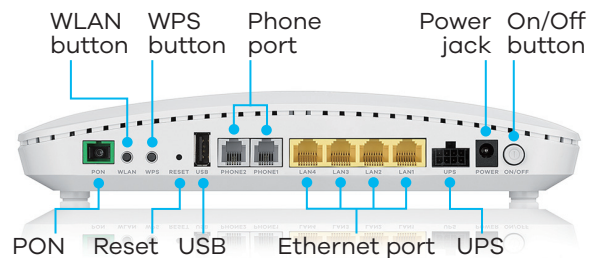
Application Diagram



Front Panel



Rear Panel



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