PM7300-T0

XGS-PON SFU with 10GbE LAN

The Zyxel PM7300-T0 XGS-PON SFU with 10GbE LAN interface supports 10/10G symmetric internet speeds. It's a future-proof investment for service providers to deliver business-grade internet speeds for subscribers with high-bandwidth needs or backhaul services.

Benefits

Smooth migration to next-gen XGS-GPON network

The Zyxel PM7300-T0 serves as a managed bridge that enables service providers to deliver symmetric 10/10G data access to subscribers, allowing seamless, smooth network upgrade from existing GPON to XGS-PON.

10GbE LAN interface for symmetrical internet speeds

Equipped with one 10GbE LAN port, the PM7300-T0 empowers service providers to deliver reliable, unblocking symmetric high-speed FTTH services to SOHO or power home network subscribers.

Future-proof investment while service upgrade

Thanks to its superior interoperability, the PM7300-T0 can connect to any layer-3 devices such as routers, WiFi APs, and home gateways. Given the rapid evolution of WLAN technology and gateway interface requirements, service providers can always deliver premium services with cutting-edge technology without changing the entire fiber network infrastructure.

- Integrated internet services through 10G fiber
- Compact design for flexible deployment
- Remote management via TR-069 and OMCI
- Zyxel-developed OPAL for superior flexibility and faster time to market
- Comprehensive QoS for network efficiency
- Integrated with Zyxel NetAtlas EMS and Zyxel GPON OLTs

10G

Comprehensive QoS for superior network efficiency

Based on your service offerings to customers, you can freely define QoS policies and prioritize mission-critical traffic. Defining QoS will improve your customer's network efficiency and give them the super-fast multi-play service quality they want.

Simplify your network deployment and management

The PM7300-T0 works perfectly with Zyxel's next-generation OLT systems and the centralized network management system – NetAtlas*. Service providers can ensure a smooth transition to 10G network while optimizing operational efficiency with the powerful remote management features.

TR-069 remote management for lower OPEX

Supporting TR-069 remote management specifications, the PM7300-T0 enables service providers to process remote configuration, upgrade software, run diagnostics, and provide management — all from customer support offices located anywhere. This greatly reduces service expenses while enhancing customer satisfaction.

Zyxel OPAL firmware delivers flexibility and faster time to market

Compliant with the same OPAL firmware trunk applied to all Zyxel CPE, the PM7300-T0 inherits a field-proven feature set that includes TR-069 and more. Service providers can ensure the same user experience when migrating to new devices.

Specifications

System specifications

XGS-PON compliance
- Complies with ITU-T G.9807.1
- DS/US speed: 9.95328/9.95328 Gbps
- Wavelength: 1577 nm (DS) & 1270 nm (US)
- Complies with Class N1/N2/E1/E2
- Physical distance reach to 20 km
- Dynamic Bandwidth Allocation (DBA)
- Configurable AES DS and FEC DS/US
- GPON Encapsulation Method (GEM) supports Ethernet packet
- Supports GEM header removal/insertion and data extraction/segmentation (GEM SAR)
- Supports up to 32 T-CONs each with priority queues (US); supports up to 256GEM ports
- Flexible mapping between T-CONT and GEM port

Layer 2 networking features
- MAC filtering
- Multicast transparent
- IPv6 address transparent

Multicast
- IGMP v1/v2/v3 snooping
- IPv6 MLD v1/v2 snooping

Feature capability
- VLAN IEEE 802.1Q
- Ethernet port based VLAN tag and untag
- Supports protocol based VLAN
- 1:1 VLAN, N:1 VLAN, VLAN transparent bridge
- LAN port-based VLAN tag add and tag removal
- Q in Q VLAN
- Supports at most 64 concurrent configurable VLANs with VLAN ID between 1 and 4095
- Supports up to 2K MAC address entries

QoS
- Traffic classification and tagging via DSCP/VLAN/802.1P-bit
- Gem port rate limitation for US/DS traffic
- Per-port QoS and CoS mapping according to IEEE 802.1q and IEEE 802.1p priority
- SP/WRR/SP+WRR

Security
- MAC filtering

Management
- Standard OMCI (ITU-T G.988)/TR-069
- Web GUI (HTTP/HTTPS)

Hardware specifications
- WAN: One XGS-PON uplink with SC/APC connector
- LAN: One five-speed 100M/1G/2.5G/5G/10G Gbps RJ-45 port
- Reset: one reset/restore factory default button
- Power switch: one push type button
- LEDs indicators:
  - Power
  - PON
  - LOS
  - LAN
- Power supply: 12 V DC/1 A

Power consumption

- 12 Watt max

Physical specifications

- Item dimensions (WxDxH):
  130 x 120 x 42 mm
  (5.12" x 4.72" x 1.65")
- Item weight: 198 g (0.44 lb.)
- Packing dimensions (WxDxH):
  264 x 142 x 43 mm
  (10.39" x 5.59" x 1.69")
- Packing weight: 463 g (1.02 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:
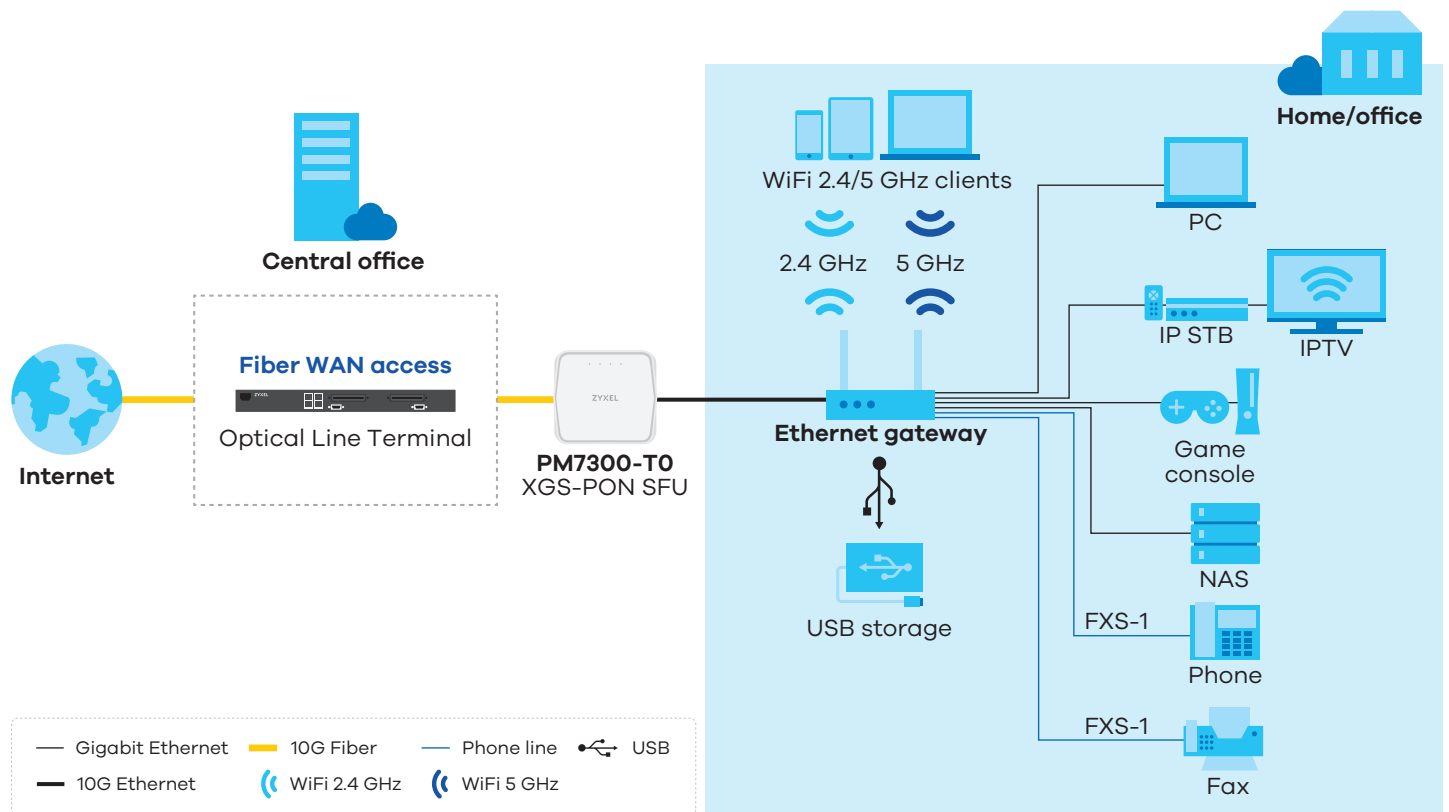 10% to 95% RH (non-condensing)

Certification

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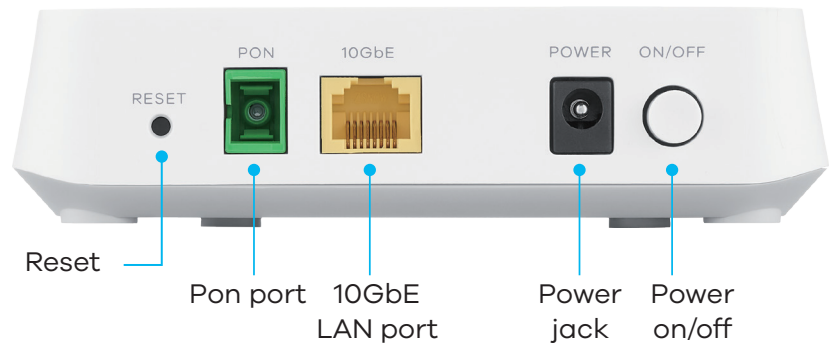- Energy saving: ErP

Package contents

- Device
- Power adaptor
- Ethernet cable
- Safety warning & DoC letter
- Quick start guide

* NetAtlas feature is only available in Zyxel End-to-End Solutions. Please contact us for function availability.

Application diagram

Hardware description

Reset

Pon port

10GbE LAN port

Power jack

Power on/off

RESET

PON

10GbE

POWER

ON/OFF

10/02/22

Datasheet PM7300-T0