ZYXEL
COMMUNICATIONS

EP240P

GPON PoE HGU with 4-port GbE LAN

The Zyxel EP240P GPON PoE HGU with a 4-port GbE LAN is fully compliant with IEEE 802.at (PoE+) and ITU-T G.984 standards. The uplink features ultra-high-speed fiber access. The downlink characterizes 4-port GbE LAN for wired connection. Moreover, each LAN with PoE+ capacity supports 30 W and the whole system 70 W.

As a Power Sourcing Equipment (PSE), the EP240P can supply power and transmit data simultaneously via its LANs to Powered Devices (PD). Furthermore, with tailor-made software features and integration with Zyxel NetAtlas EMS and OLT, the EP240P is the best choice for service providers to support enterprise deployment scenarios.

Benefits

Increased network power sourcing and data transmission efficiency

The EP240P, a Power Sourcing Equipment (PSE), features convenient data transmission and power supply within a single cable. Compliant with 802.3at and 802.3af, the EP240P secures infrastructure costs by reducing the number of power adapters, while at the same time increasing deployment flexibility with minimal OPEX.

Supports Gigabit data access via passive fiber

Compliant with IEEE 802.3at/af standard

30 watt output per LAN port/ up to 70 watt per system

Remote management via TR-069, Zyxel NetAtlas EMS and Zyxel OLT

Simultaneous port-based bridge and router modes

Temperature-hardened for flexible installation

Datasheet EP240P

Faster time-to-market with remote management and OPAL platform

Compatible with Zyxel NetAtlas EMS and Zyxel OLTs, the EP240P supports zero-touch provisioning, while at the same time allowing service providers the provision and ability to manage remotely broadband, VoIP, WiFi, and PoE related settings. Meanwhile, with the in-house design OPAL trunk, the EP240P inherits a rich, field-proven feature set such as in the TR-069, VoIP, and more to secure the same user experience as all Zyxel CPE products.

Hybrid SFU/HGU mode to secure CAPEX

With configurable port-based SFU/HGU features, the EP240P offers hybrid flexibility for service providers to minimize CAPEX by combing an SFU bridge and an HGU router in a single box. It also saves costs when service demands or deployment scenarios change.

Specifications

System specifications

GPON compliance
- Complies with ITU- G.984.1/G.984.2/ G.984.3/G.984.4/G.988 GPON standards
- Complies with class B+ type PMD
- DS/US speeds: 2.488/1.244 Gbps
- Wavelength: 1490 nm (DS) & 1310 nm (US)
- Physical distance reach up to 20 km
- Dynamic Bandwidth Allocation (DBA)
- Configurable AES DS and FEC DS/US
- GEM supports Ethernet packet
- GEM SAR
- 8 priority queues (US) on each GPON T-CONT

Ethernet (LAN) features
- Full duplex IEEE 802.3x
- MAC address learning
- IPv6 address transparent

PoE functions
- Complies with IEEE 802.3af (PoE) and IEEE 802.3at (PoE+) standards
- Integrated PoE PSE for each LAN interface
- Each LAN port supports 30 watt, per system support 70 watt
- Supports class 0 to class 4
- PoE power status monitoring
- Oversubscribing power adjustment
- Scheduling
- LLDP negotiation
- Port-based priority

Networking features
- IEEE 802.1d transparent bridge
- IPv4 NAT/routing
- Static routing, dynamic routing (RIP)
- IPv6 with IPv6 routing
- IPv6 dual stack/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
- 1:1 VLAN, N:1 VLAN, VLAN transparent transmission
- VLAN tag add/translation/removal
- QinQ VLAN

QoS
- Traffic classification and tagging via DSCP/VLAN/802.1P-bit
- Per-port QoS and CoS mapping according to IEEE 802.1q and IEEE 802.1p priority
- SP/WRR/SP+WRR

Multicast
- IGMP v1/v2/v3
- IGMP proxy/snooping
- IGMP fast leave
- IPv6 MLD v1/v2/proxy/snooping

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, consult on hold, attendant)
  - Call hold/call retrieve
  - Three-way conference
  - Second call/adding an outgoing call
  - Switch between 2 active calls

USB
- USB 2.0; backward compatible to USB 1.1 (FS/LS)
- FTP-based network storage
- DLNA/UPnP media server
- File sharing

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

Management
- Web (HTTP/HTTPS)/Telnet (CLI)
- OMCI (G.984.4)/TR-069 CWMP client
- PLOAM
- Firmware upgrade via FTP/HTTP/ TR-069/OMCI
- Supports Zyxel auto-provisioning

Hardware specifications

- WAN: one Gigabit optical interface SC/APC
- Phone: two FXS RJ-11 ports
- LAN: four 10/100/1000 Mbps Ethernet RJ-45 ports
- UPS power input: DC 54 V, 8 pin connector
- USB: one USB 2.0 port
- Reset: a tact switch. One reset/ restore factory default button
- Power: power on/off switch
- LEDs indicators:
  - Power
  - PON
  - Internet
  - Phone
  - USB
  - UPS
  - LAN (on connectors)
  - PoE (on connectors)

Power consumption

- 11 W (PoE port without PD)
- 81 W (PoE port with PD having the maximum power consumption)

Physical specifications

- Item dimensions (WxDxH): 196.9 x 143 x 43.5 mm (7.8″ x 5.6″ x 1.7″)
- Item weight: 368 g (0.81 lb.)
- Packing dimensions (WxDxH): 335 x 211 x 53 mm (13.2″ x 8.3″ x 2.1″)
- Packing weight: 1331 g (2.93 lb.)

Environment specifications

Operating environment

- Temperature: -10°C to 50°C (14°F to 122°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)
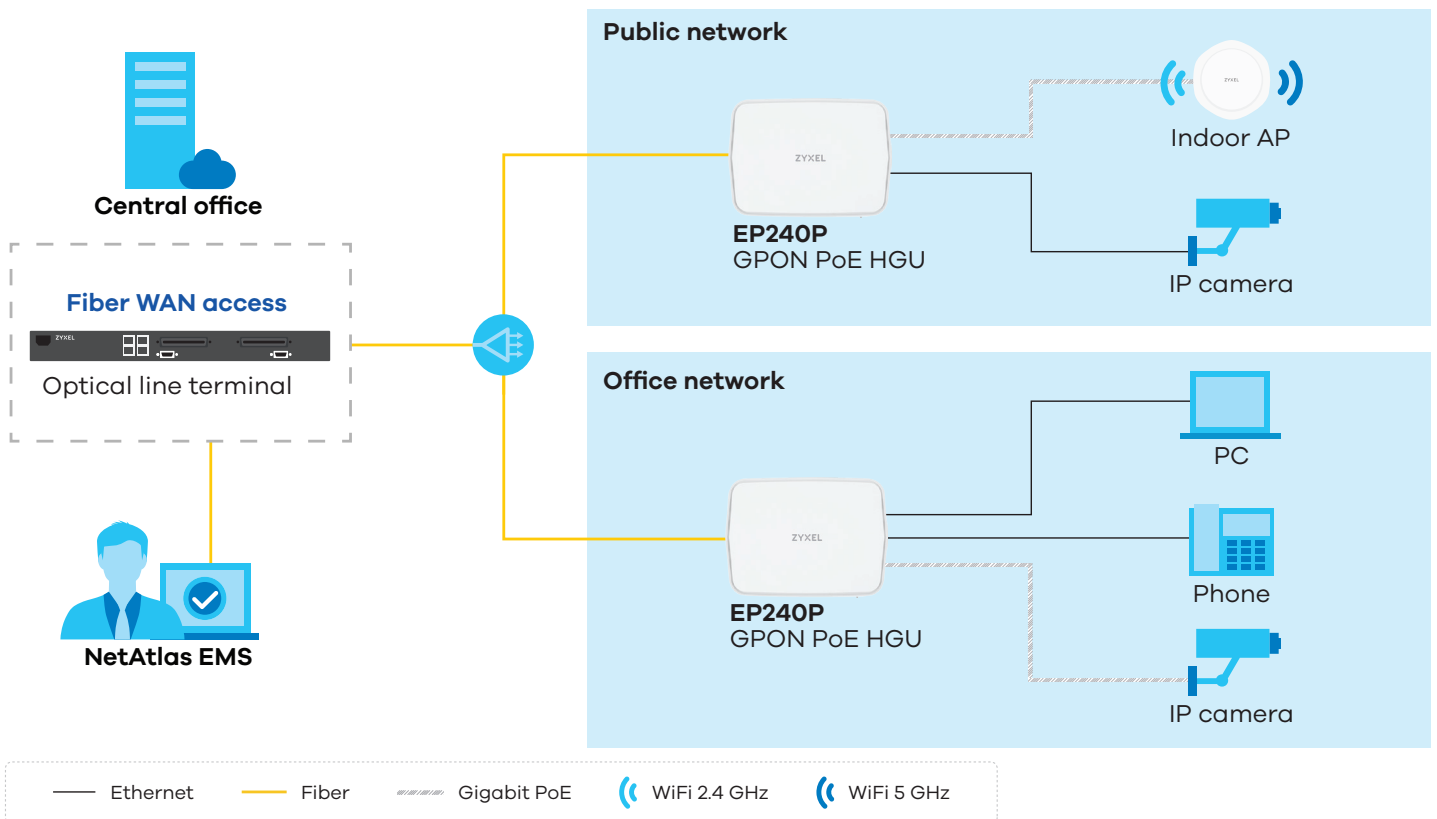
Certification

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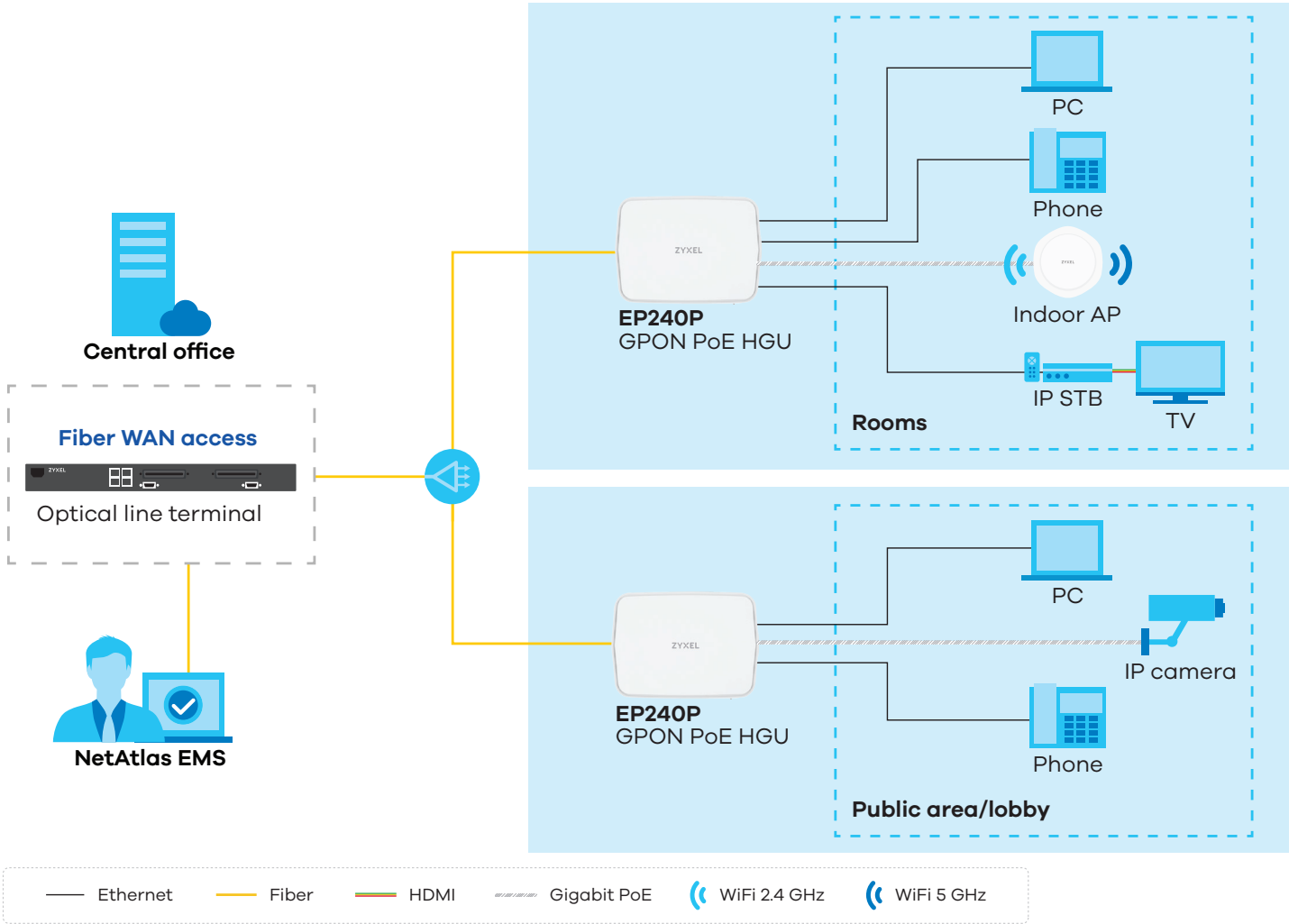- Energy saving: ErP

Package contents

- Power adapter
- Ethernet cable
- Safety warning & DoC letter
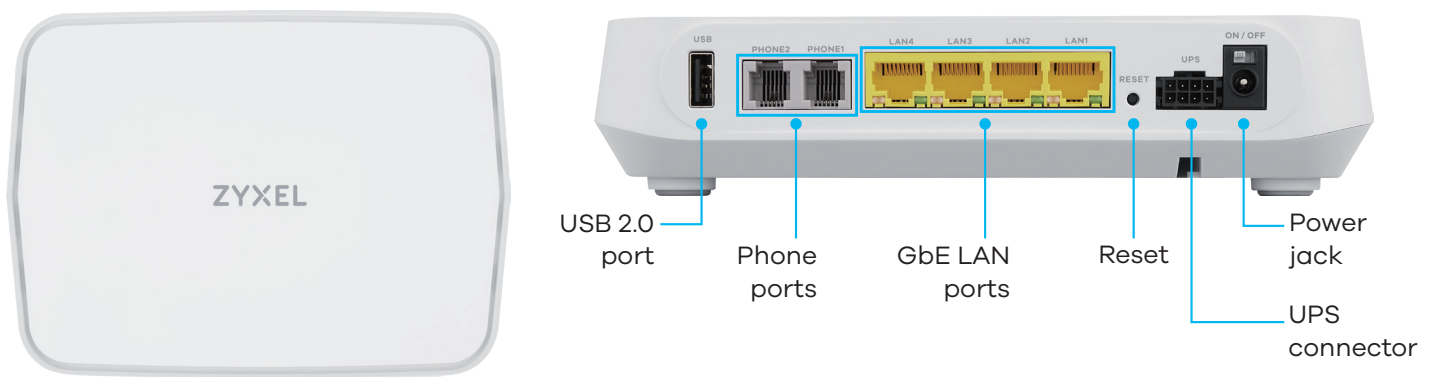- Quick Start Guide

Application diagram

Enterprise/SoHo application

Hospitality application

— Ethernet	— Fiber	— HDMI	Gigabit PoE	WiFi 2.4 GHz	WiFi 5 GHz	

Hardware description

USB 2.0 port

Phone ports

GbE LAN ports

Reset

Power jack

UPS connector