

XPON ONT Flash

2K05X Dual Band



Features & Benefits

- Dual mode ONT (GPON and EPON)
- Complaint with G984.2 & IEEE 802.3ah
- Plug and play
- Wi-Fi 802.3 b/g/n/ac (Dual band)
- Compliant with TR-069
- 2 Gigabit ports
- ONU Auto discovery



Overview

PPC's Optical Network Terminal (ONT) can be used in applications ranging from residential units to enterprise solutions. The GPON HGU (Home Gateway Unit) incorporates interoperability, key customer specific requirements, scalability and cost efficiency. Equipped with an ITU-T G.984 compliant 2.5G Downstream and 1.25G Upstream GPON interface, this device supports triple-play services including voice and high-speed internet access service. The ONT is highly reliable and easy to maintain, with guaranteed QoS for different service.

The ONT is fully compliant with GPON and EPON technical regulations such as ITU-T G.984.x and IEEE802.3ah, and technical requirements of EPON equipment. Dual mode HGU can detect and exchange PON mode automatically. Compliant with standard OMCI definition, this device is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance. This ONT can act as a wire-speed L2 switch and L3 routing gateway with functions including port forwarding, NAT, NAPT and PPPoE clients provide services. This model of ONT is equipped with 1 Uplink GPON, 2Gigabit Ethernet LAN and WiFi supporting 802.11b/g/n/ac.

Technical Data

Interface

| Specification | Value |
|--------------------|---|
| PON interface | 1*GPON port, FSAN G.984.2 standard, Class B+ |
| | Downstream Data Rate: 2.488Gbps |
| | Upstream Data Rate: 1.244Gbps |
| | SC/APC single mode fiber |
| | 27dB Link loss and 20KM distance with 1:128 split ratio |
| Ethernet Interface | 2*10/100/1000M auto-negotiation |
| | Full/half duplex mode |
| | RJ45 connector |
| | Auto MDI/MDI-X |
| | 100m distance |
| Power Interface | 12V 1A DC Power supply |
| | 2-PIN power adaptor input |
| | Power switch |
| | Power consumption: less than 10W |

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Technical Data

Interface (cont.)

| Specification | Value |
|--------------------|--|
| Wireless interface | Compliant with IEEE 802.11 b/g/n /ac |
| | Support 2.4GHz & 5GHz |
| | Multiple SSID's |
| | 64 and 128 bit Wireless Encryption Protocol (WEP) support |
| | Wireless Protected Access support including Pre-Shared Key (WPA-PSK) |
| | Radio switched on/off function Support WPS |
| | 5dBi antenna gain |
| | Support higher 256-QAM modulation mode |
| | Support MIMO-OFDM encoding mode |
| | 2.4GHz supports 2*2 MIMO (Multiple-Input Multiple-Output) technology |

Performance Parameter

| Specification | Value |
|-----------------------------|--|
| PON Optical Parameter | Wavelength: Tx 1310nm, Rx1490nm |
| | Tx Optical Power: 0.5~5dBm |
| | Rx Sensitivity: -27dBm |
| | Saturation Optical Power: -11dBm |
| Data Transmission Parameter | PON Throughput: Downstream 2.488Gbit/s s; Upstream 1.244Gbit/s |
| | Ethernet: 1000Mbps |
| | Packet Loss Ratio: <1*10E-12 |
| | latency: <1.5ms |
| | |
| Access Control | Parent Control |
| | Local Management Control |
| | Host List |
| | Access Schedule |
| | Rule Management |
| Switching Parameters | Ethernet port auto negotiation or manual configuration |
| | Switching Parameters |
| | Hardware priority queues on the downstream direction in support of CoS |
| | Port-based/802.1p/IP-TOS priority |
| | 4 priorities control |
| | 802.1D bridging |
| | VLAN tagging/detagging per Ethernet port |
| | VLAN stacking (Q-in-Q) and VLAN Translation |
| | Class of Service based on UNI, VLAN-ID, 802.1p bit, and combination |
| | Marking/remarking of 802.1p |
| | IGMP v2/v3 snooping and IGMP snooping with proxy report |
| | Broadcast/Multicast rate limiting |
| | Multiple WAN interfaces supporting |

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Technical Data

Performance Parameter (cont.)

| Specification | Value |
|----------------------|--|
| Switching Parameters | WAN connection <ul style="list-style-type: none"> • Point-to-Point Protocol over Ethernet (PPPoE) • Dynamic Host Configuration Protocol (DHCP) • Static |
| | DHCP server for LAN devices |
| | DNS relay |
| | Network Address Translation (NAT) / Network Address Port Translation (NAPT) |
| | Port forwarding |
| | Static routing |
| | Traffic classification and QoS based on Layer 3 and Layer 4 Identifier |
| | Access Control List (ACL) |
| | VPN Pass thru for Point to Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP) and IP Security Protocol (IPSec) |
| | Firewall |
| | Application Layer Gateway (ALG) |
| | Dynamic Domain Name Server (DDNS) |
| | Network Time Protocol (NTP) |
| | Universal Plug and Play (uPnP) |
| | IGMP proxy |

Standard Protocols

| Specification | Value |
|---------------|-------------------------------------|
| PON Protocols | ITU-T Recommendation G.984.x (GPON) |
| | ITU-T Recommendation G.988 (OMCI) |
| | Advanced Encryption Standard (AES) |
| | Forward Error Correction (FEC) |
| | Class B+ optics (28dB) |
| | T-CONTs: 32 |
| | Logical Range: 60 km |
| | Max Transmission Distance: 20 km |
| | GEM Port-IDs: 255; |

Device Management

| Specification | Value |
|---------------------|---|
| Management mode | Standard compliant OMCI interface as defined by ITU-T G.984.4 |
| | Support TR069 and WEB management |
| | Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988 |
| | Compliant to TR-069 |
| Management Function | Status monitor, Configuration management, Alarm management, Log management |

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Technical Data

Physical Features & Environmental Conditions

| Specification | Value |
|-----------------------|--|
| Dimension | 210mm×150mm×32mm (W x D x H) |
| Weight | 300 g |
| Operating temperature | 0 °C to 50 °C (32 °F to 122 °F) |
| Operating Humidity | 10% ~ 90% (non-condensing) |
| Storage temperature | -40 °C to 80 °C (-40 °F to 176 °F) |
| Storage Humidity | 5% ~ 95% (non-condensing) |
| Mounting option | Desktop & Wall mounting |
| LED | Power, Internet, PON, LOS, LAN1, LAN2, WiFi, WPS |

Ordering Information

| Part Number | Description |
|-------------|------------------------------------|
| 2K05X | XPON ONT 2GE with WiFi (Dual Band) |