

XPON ONT Flash

4K25X Dual Band



Features & Benefits

- Dual mode ONT (GPON and EPON)
- Compliant with G984.2 & IEEE 802.3ah
- Plug and play
- 802.11b/g/n/ac
- Compliant with TR-069
- 2* RJ11 POTS port for voice
- 4 Gigabit ports
- ONU Auto discovery



Overview

PPC's Optical Network Terminal (ONT) can be used in applications ranging from residential units to enterprise solutions to deliver Triple-Play services to the end-subscriber in FTTx applications. 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. It's 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, IEEE802.3ah and the technical requirements of EPON equipment. Dual mode HGU can detect and exchange PON mode automatically. This device is compliant with standard OMCI definition, and is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

PPC's 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, 4Gigabit Ethernet LAN, 2POTS, 1*USB and Wi-Fi supporting 802.11b/g/n/ac.

Technical Data

Interface

Feature	Description
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	4*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 adapter input
	Power switch
	Power consumption: less than 10W
VOIP Interface	2*RJ11
	Max 1km distance
	Balanced Ring, 50V RMS

This product may be protected by one or more patents • For further information, please visit: www.ppc-online.com/patents

XPON ONT Flash

4K25X Dual Band



Technical Data

Interface (cont.)

Feature	Description
USB Interface	1*USB 2.0 interface
	Transmission Rate: 480Mbps
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
	Transmitter Power:
	<ul style="list-style-type: none"> • 2412-2472 MHz: 19.83 dBm • 5180-5320 MHz: 20.20dBm • 5500-5700 MHz: 21.17 dBm • 5745-5875MHz: 21.67 dBm

Performance Parameter

Feature	Description
PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm
	Tx Optical Power: 0.5~5dBm
	RX Sensitivity :-28dBm
	Saturation : -8 dBm
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
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

XPON ONT Flash

4K25X Dual Band



Technical Data

Performance Parameter (cont.)

Feature	Description
Switching Parameters	WAN <ul style="list-style-type: none"> Point-to-Point Protocol over Ethernet (PPPoE) Dynamic Host Configuration Protocol (DHCP) <ul style="list-style-type: none"> 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
VOIP	Support H.248 and SIP protocol
	G.711/G.723/G.726/G.729
	Support Voice coding: ITU-T
	Support Echo cancellation
	Support high/low speed fax/Modem,bypass fax,and T38 fax
	Support InBand / RFC2833/SIP
	Support Line testing according to GR-909
	INFO, MD5 authentication, call forward, call waiting, hot-line call

Standard Protocols

Feature	Description
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;

XPON ONT Flash

4K25X Dual Band



Technical Data

Device Management

Feature	Description
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

Physical Features & Environmental Conditions

Feature	Description
Dimension	240mm×240mm×24mm (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 85 °C (-40 °F to 185 °F)
Storage Humidity	10% ~ 90% (non-condensing)
Mounting option	Desktop & Wall mounting
LED	PWR, PON, LOS, INT, LAN4, LAN3, LAN2, LAN1, TEL2, TEL1, 2.4G, 5G

Ordering Information

Part Number	Description
4K25X	XPON ONT 4GE, 2POTS with Wi-Fi 802.11 b/g/n/ac

rev2_03072023