XPON ONT Flash
2K15X Dual Band

A BELDEN BRAND

Features & Benefits

- Auto Dual PON Mode (GPON/EPON)
- Compliant With G984.2 & IEEE 802.3ah
- Zero Touch Provisioning
- Support TR-069 & Flexible With Third-Party AI Integration
- LED Indicator For Rx Optical Power
- 1x GE 1x FE 1x FXS Interface
- Wi-Fi 802.11 b/g/n/ac (Dual Band)
- Compact In Size, Wall & Desk Mountable

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. 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, 2 Gigabit Ethernet LAN, one POT 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 or SC/UPC single mode fiber
	28dB 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 1.5A DC Power supply
	2-PIN power adapter input
	Power switch
	Power consumption: less than 10W
VOIP Interface	1 *RJ11
	Max 1km distance
	Balanced Ring, 50V RMS

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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
	Transmitter Power: • 2412-2472 MHz; 19.83 dBm • 5180-5320 MHz: 20.20dBm • 5500-5700 MHz: 21.17 dBm • 5745-5875MHz: 21.67 dBm

Performance Parameter

Specification	Value
PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm
	Tx Optical Power: 0.5~5dBm
	Rx Sensitivity: -28dBm
	Saturation Optical Power: -8dBm
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

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Performance Parameter (cont.)

Specification	Value
Switching Parameters	IGMP v2/v3 snooping and IGMP snooping with proxy report
	Broadcast/Multicast rate limiting
	Multiple WAN interfaces supporting
	WAN • 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
	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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Physical Features & Environmental Conditions

Specification	Value
Dimension (W x D x H)	210mm×150mm×32mm
Weight	300 g
Operating temperature	0°C ~ 50°C (32 °F to 122 °F)
Operating Humidity	10% ~ 90% (non-condensing)
Storage temperature	-40°C ~ 80°C (-40 °F to 176 °F)
Storage Humidity	5% ~ 95% (non-condensing)
Mounting option	Desktop & Wall mounting
LED	POWER PON LOS INT GE1 GE2 TEL 2.4G 5G OPT

Ordering Information

Model number	Description
2K15X	XPON ONT 2GE 1POTS with Wi-Fi (Dual Band)

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