

XPON ONT

4GE+2POTS(optional)+2USB+WIFI6 3000Mbps

1、Product Overview:

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, XPON WIFI6 ONT incorporates interoperability, key customers' specific requirements and cost-efficiency.

It integrates XPON (supports 2.5G Downstream and 1.25G Upstream), routing, switching, security, WiFi6 (802.11 a/b/g/n/ac/ax), VoIP and USB functions in one, which can support security management, security management and USB functions while satisfying users' basic broadband Internet access. Content filtering and other functions, and supports WEB graphical management, OAM/OMCI and TR069 network management functions, which greatly facilitates network management and maintenance of network administrators.

Compliant with standard OMCI definition and China Mobile Intelligent Home Gateway Standard, XPON ONT is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.



2、Main Feature

1) OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988
- Alarming and performance monitoring
- Remotely software image download over OMCI, as well as activation and rebooting

- Hold two software sets with software image integrity checking and automatic rollback

2) XPON Interface

- Compliant with ITU-T G.984 GPON standards
- BOSA on board optical solution
- 1.244 Gbps Burst Mode Upstream Transmitter
- 2.488 Gbps Downstream Receiver
- Compliant with ITU-T G.984.2 Amd1, Class B+
- Wavelengths: US 1310nm, DS 1490nm
- Multiple T-CONTs per device
- Multiple GEM Ports per device
- Flexible mapping between GEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction) in both directions
- DBA reporting by piggyback reports in the DBRU (mode 0 and mode 1)
- Mapping of GEM Ports into a T-CONT with priority queues based scheduling
- Support Multicast GEM port and incidental broadcast GEM port.

3) WIFI 6

- ◆ Complies with IEEE 802.11 a/b/g/n/ac/ax standards.
- ◆ Supports 20/40M bandwidth in the 2.4G band and 20/40/80M bandwidth in the 5G band.
- ◆ 2T2R in 2.4G + 2T2R in 5G, supports up to 573+2402Mbps PHY rate.
- ◆ MU-MIMO TX/RX support.
- ◆ Supports MU-OFDMA TX/RX.
- ◆ Can be configured as 2x2 MIMO A band, or 2x2 MIMO G band, or 2x2 MIMO A band + 2x2 MIMO G band.
- ◆ Supports global Wi-Fi 5G channels, including the new band (5925MHz) in the US and China.
- ◆ Integrated 2.4GHz/5GHz PA, LNA and TRSW.

- ◆ Integrated power detector to support Tx power control per packet.
- ◆ Built-in calibration of PVT variations

4) Data

The ONT is delivered with 4 * 10/100/1000 Base-T interface, supporting:

- Auto-negotiation and MDI/MDIX auto-sensing
- Built-in layer-2 switch
- Advanced data features such as VLAN tag manipulation, classification, and filtering
- Built-in layer-3 routing and residential gateway
- 2.4G 573Mbps+2402Mbps WLAN interface
- USB

5) Voice

The ONT can optionally be delivered with one POTS interface port for carrier-grade voice services, supporting:

- Multiple voice codec
- Echo Cancelling, VAD, CNG
- Supporting static or dynamic jitter buffer
- Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer, etc. SIP (RFC3261)
- MEGACO v2 (H.248)

To enable VoIP access, the ONT also supports interfacing external IAD box or Home Router with voice capability through the Ethernet Interface.

3. Specification

Optical SPEC	Working wavelength	nm	TX/RX: 1310/1490
	The light emitting power	dBm	1 ~ 4(xPON)
	The light receiving sensitivity	dBm	≥ -27
	Optical fiber connector	/	PON: SC/UPC Or SC/APC

Port	The user side Ethernet ports	/	4GE
	USB	/	2USB
	POTS	/	1
WiFi6	2.4G WIFI	/	IEEE 802.11 a/b/g/n/ac/ax 573+2402Mbps
	5G WIFI	/	
Other	The power supply	V/A	AV110 ~ 255V→DC12V 1.5A
	Work temperature	℃	-5 ~ 45

4. Order Information

4GE+Wi-Fi6 AX3000	QF-XL400AX3		XPON/1.25G/2.5G 4GE Wi-Fi6 AX3000 EasyMesh. Chips: RTL9617C-DQ, 1Gbit DDR, 1Gbit Flash.
4GE+Wi-Fi6 +2POTS AX3000	QF-XL402RAX3		XPON/1.25G/2.5G 4GE 2VoIP Wi-Fi6 AX3000 EasyMesh. Chips: RTL9617C-DQ, 1Gbit DDR, 1Gbit Flash