

Echolife ONT

Port Specifications

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1 GPON Port Specifications

This topic describes specifications and standards compliance of the GPON interfaces.

Table 1-1 GPON port specifications

Parameter	Specifications
Transmission rate	Rx: 2.488 Gbit/s Tx: 1.244 Gbit/s
Connector	SC/APC
Maximum transmission distance	20 km
Standard compliance	ITU-T G.984.2 CLASS B+
Center wavelength	Tx: 1310 nm Rx: 1490 nm
Tx optical power	0.5 dBm to 5.0 dBm
Extinction ratio	> 10 dB
Minimum receiver sensitivity	-27 dBm
Maximum overload optical power	-8 dBm

2 XG-PON Port Specifications

This topic describes specifications and standards compliance of the XG-PON interfaces.

Table 2-1 XG-PON port specifications

Parameter	Specifications(CLASS N1)	Specifications(CLASS N2a)
Transmission rate	Rx: 9.953 Gbit/s Tx: 2.488 Gbit/s	
Connector	SC/UPC	
Maximum transmission distance	20 km	
Standard compliance	ITU-T G.987.2 CLASS N1	ITU-T G.987.2 CLASS N2a
Center wavelength	Rx: 1577 nm Tx: 1270 nm	
Tx optical power	2.0 dBm to 7.0 dBm	
Extinction ratio	> 8.2 dB	
Minimum receiver sensitivity	-28 dBm	-28 dBm
Maximum overload optical power	-8 dBm	-8 dBm

3 GE Port Specifications

This topic describes the specifications and standards compliance of Gigabit Ethernet (GE) ports.

Table 3-1 Specifications of a GE port

Parameter	Specifications
Connector type	RJ-45
Port rate	10 Mbit/s, 100 Mbit/s, or 1000 Mbit/s
Maximum transmission distance	100 m
Working mode	Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s
Cable specifications	Category 5 UTP
Compliant standard	IEEE 802.3i IEEE 802.3u IEEE 802.3ab

4 10GE Port Specifications

This topic describes the specifications and standards compliance of 10 Gigabit Ethernet (10GE) ports.

Table 4-1 Specifications of a 10GE port

Parameter	Specifications
Connector type	RJ-45
Port rate	100 Mbit/s, 1000 Mbit/s, or 10 Gbit/s
Maximum transmission distance	100 m
Working mode	Auto-adaptive 100 Mbit/s, 1000 Mbit/s, or 10 Gbit/s
Cable specifications	Cat6 shielded straight-through cable
Compliant standard	IEEE 802.3an IEEE 802.3u IEEE 802.3ab

5 CATV Port Specifications

This topic describes the specifications of cable TV (CATV) ports.

Table 5-1 Specifications of a CATV port

Parameter	Specifications
Connector type	F-type
Bandwidth	54-870 MHz
Output resistance	75 ohms
Cable specifications	CATV cable

6 POTS port

This topic describes the specifications and standards for the plain old telephone service (POTS) port supported by the ONT.

Table 6-1 POTS Port Specifications

Parameter	Specifications
Connector type	RJ-11
Transmission rate	64 kbit/s
Maximum transmission distance	300 m
Cable type	Twisted pair
Line coding	Pulse code modulation (PCM)
Frame protocol	Time division multiplexing (TDM)
Standard compliance	ITU-T Q.551 ITU-T Q.552

7 USB Port

This topic describes the specifications of the USB port on the ONT.

Table 7-1 Specifications of the USB port

Parameter	Specification
Transmission rate	480 Mbit/s
Support type	USB 2.0 HOST and USB 1.1

8 Wireless Network Access

This topic describes the wireless network access indicators of the ONT.

Table 8-1 2.4GHz Wireless network access indicators

Parameter	Indicator
Standards compliance	802.11b/g/n
Specification	<ul style="list-style-type: none"> ● 4 SSIDs ● 13 working channels ● Automatic rate adjustment ● Transmit power adjustment
Authentication	<ul style="list-style-type: none"> ● Open system or shared key authentication mode ● WPA-PSK, WPA2-PSK, WPA, WPA2, AES, or TKIP authentication mode
Encryption	64-bit and 128-bit WEP encryption

Table 8-2 5GHz Wireless network access indicators

Parameter	Indicator
Standards compliance	802.11a/n/ac
Specification	<ul style="list-style-type: none"> ● 4 SSIDs ● DFS (Dynamic Frequency Selection) ● Automatic rate adjustment ● Transmit power adjustment

Parameter	Indicator
Authentication	<ul style="list-style-type: none">● Open system or shared key authentication mode● WPA-PSK, WPA2-PSK, WPA, WPA2, AES, or TKIP authentication mode
Encryption	64-bit and 128-bit WEP encryption

9 ZigBee/Z-Wave Access

This topic introduces the wireless network access indicators of the ONT.

Table 9-1 Zigbee/Z-Wave access indicators

Indicator	Value(ZigBee)	Value(Z-Wave)
Standards compliance	IEEE 802.15.4 For ZHA1.2 and ZLL1.0 device management	ITU-T G.9959 For device plus management
Communication frequency	2.4GHz	<ul style="list-style-type: none"> ● Australian standard: 908.4-916 MHz ● U.S. standard: 919.8-921.42 MHz ● Europe standard: 868.4-869.8 MHz <p>NOTE Frequency bands are used according to specific countries.</p>
Transmission rate	250 kbit/s (highest)	100 kbits/s
Tx power	2 dBm	2 dBm
Transmission distance	100 m	100 m
Specifications	<ul style="list-style-type: none"> ● Supports separated home IDs. ● Every node ID is allocated by the controller. ● A maximum of 16 sensors (slaves) are recommended. 	<ul style="list-style-type: none"> ● Supports separated home IDs. ● Every node ID is allocated by the controller. ● A maximum of 16 sensors (slaves) are recommended.