

**Wi-Tek**  
Wi-Tek WI-POL5800-08  
POL WLAN Solution  
OLT-Wireless Tek



# Wi-Tek WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek User Manual

[Home](#) » [Wi-Tek](#) » Wi-Tek WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek User Manual 



## Contents

- [1 Wi-Tek WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 WLAN solution](#)
- [5 Network planning](#)
- [6 Hotel Application](#)
- [7 Documents / Resources](#)
  - [7.1 References](#)
- [8 Related Posts](#)

## Wi-Tek WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek



## Product Information

### Specifications:

- Model: OLT WI-POL5800-08 & MDU WI-POL308G-P
- Uplink Rate: 1.244Gbps (max uplink), 2.488Gbps (max downlink)
- DBA Types: Type 1 (Fixed bandwidth), Type 2 (Assured bandwidth), Type 3 (Assured bandwidth + Max bandwidth), Type 4 (Max bandwidth), Type 5 (Mixed bandwidth)

## Product Usage Instructions

### WLAN Solution

To install and configure the GPON OLT for WLAN application, follow these steps:

1. Routing cables according to your network planning
2. Power on the system
3. Set up WLAN application settings

### Network Planning

#### Bandwidth Planning

GPON technology uses asymmetric PON technology with specific uplink and downlink rates. Determine the number of ONUs connected based on spectral ratio and VLAN configurations.

#### DBA Planning

Dynamic Bandwidth Allocation (DBA) is crucial for configuring uplink dynamic bandwidths. Use a simple DBA planning with Type 3 and Type 4 mixed DBA for efficient bandwidth allocation.

### Hotel Application

For hotel applications, configure network topologies with specific services allocated to ports, servers, and VLANs.

### Configure the ONU to Go Online

#### Configure the DBA Profile

Set up the DBA profile using GPON standard templates (Type 1 to Type 5) for efficient bandwidth allocation.

### FAQ:

- **Q: What is DBA planning?**

A: DBA (Dynamic Bandwidth Allocation) is used to configure uplink dynamic bandwidths for efficient network usage.

- **Q: How many T-CONTs does a line profile allow?**

A: A line profile allows a maximum of 4 T-CONTs for efficient data transmission.

### Wi-Tek POL WLAN Solution User Manual

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[www.wireless-tek.com](http://www.wireless-tek.com)

### About This Document

This topic describes how to install and configuration the GPON OLT, including routing cables, and powering on the system, and setting in WLAN application. This section uses the OLT WI-POL5800-08 & MDU WI-POL308G-P as an example.

The intended audience provides a reference for network design.

## History

Updates in V1.0 (2024-07-15)

The first release.

## WLAN solution

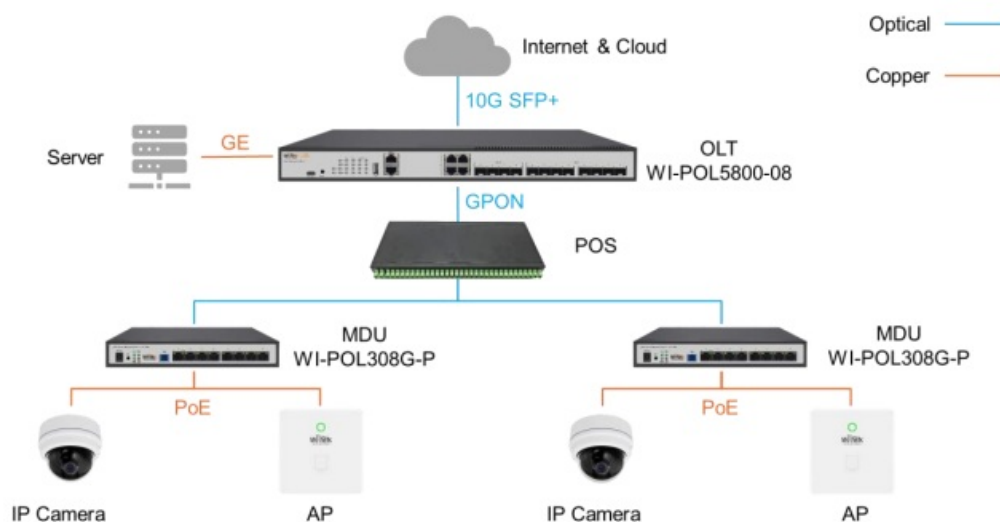
The passive optical hotel network integrates wireless, wired, video, voice, intelligent room service and other business development requirements, and proposes the all-optical intelligent hotel concept and the room service carrying mode of “one room, one fiber and multiple services” to meet the carrying requirements of various hotel information systems and simplify networking and management.

The common business types of hotels are as follows:

1. **Voice service:** The voice service of the front desk and the guest room, the voice external line is provided by the telecom company, and the voice internal line is provided by the hotel voice system.
2. **Guest network:** Internet access service is provided for guests in the hotel. The Internet network outlet of the hotel is provided by the telecom company, and the Internet service inside the hotel is distributed to each room by the network built by the hotel.
3. **IPTV network:** Provide in-room live video/on-demand service for guests.
4. **Hotel office network:** To provide office network services for hotel employees, mainly covering offices, meeting rooms, hotel reception and other areas.
5. **CCTV network:** the camera sends the captured video or picture back to the video monitoring center of the hotel in real time for further processing and storage.

The voice service network, guest network, IPTV network, hotel office network, and monitoring network are logically divided into five networks, which can be physically combined into one physical carrier network.

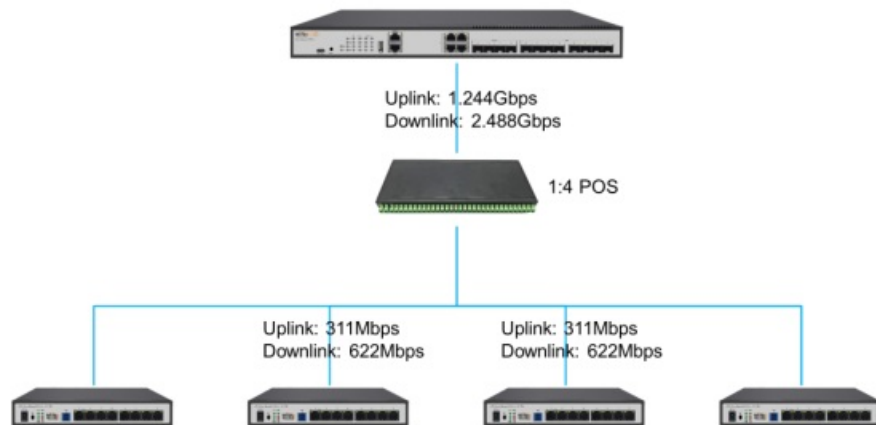
While saving the cost of network construction, it can also effectively reduce the cost of decoration construction and wire consumption.



## Network planning

## Bandwidth planning

GPON technology uses asymmetric PON technology, the maximum uplink rate is 1.244Gbps, the maximum downlink rate is 2.488Gbps, using different spectral ratio can determine the number of ONUs directly connected to the GPON port, the number of ONUs connected to the downstream determines the maximum concurrent upstream and downstream bandwidth.



For example, when 4 ONUs are connected at the same time and data is concurrent, the upstream bandwidth is  $1.244\text{Gbps}/4=311\text{Mbps}$ , and the downstream bandwidth is  $2.488\text{Gbps}/4=622\text{Mbps}$ .

If 8 ONUs are connected at the same time at 1:8 optical splitting, the upstream bandwidth is  $1.244\text{Gbps}/8=155.5\text{Mbps}$ , and the downstream bandwidth is  $2.488\text{Gbps}/8=311\text{Mbps}$ .

Of course, you can also set different dynamic bandwidth allocation profile to optimize and meet the needs of different services. For example, CCTV mainly uses uplink data, while Wi-Fi mainly uses downlink data.

## Data flow planning

The PON network is a L2 forwarding network. VLAN is most critical planning used to distinguish and isolate services. The planning method is recommended as follows:

1. Configure VLAN for different service areas.
2. Configure VLAN for the same service area based on service types.
3. Assign VLAN numbers continuously to ensure proper use of VLAN resources.
4. Reserve a certain number of VLAN for subsequent expansion.
5. Much devices cannot have their own VLAN interface and can only use VLAN1, such as MDU cloud management interface. In general, do not use VLAN1 for other services to avoid conflict with service planning.

### For example:

For logic areas	Service: VLAN 100~199 Core layer: VLAN 300~499 Access layer: VLAN 1000~1999 Data Flow: VLAN 3000~3999
For different service areas	Building A Floor 2: VLAN 1000~1099 Building A Floor 3: VLAN 1100~1199
For service types	Building A Floor 2 CCTV: VLAN 1000~1009 Building A Floor 2 WLAN: VLAN 1010~1019

## IP address planning

## Recommendation:

- Server, NVR, printer, IPC and other devices use static IP address, easy to use and map to Internet and other applications, locate problems. Computer, mobile devices and other devices use DHCP, meet the application scenarios such as mobile office.
- IP addresses are unique on the network. IP address conflict is not allowed.
- Private IP addresses are used on the LAN to save resources.
- The node addresses of the same service must be consecutive, which facilitates route planning and summary. Consecutive addresses facilitate route aggregation, reduce the size of the routing table, and speed up route calculation and convergence.
- The address allocation at each level should have a margin, and there is no need to add address segments and routing entries when the network scale expands.

## DBA planning

DBA (dynamically allocates bandwidth) is used to configure uplink dynamic bandwidths. It is recommended to adopt a simple DBA planning, that is, to use type3 and type 4 mixed DBA, which can ensure the bandwidth of high-priority services and share more bandwidth as much as possible when the network is idle.

Classification	Type 1	Type 2	Type 3	Type 4	Type 5
Fixed bandwidth	X	N/A	N/A	N/A	X
Assured bandwidth	N/A	Y	Y	N/A	Y
Max bandwidth	Z=X	Z=Y	Z>Y	Z	Z>= X+Y

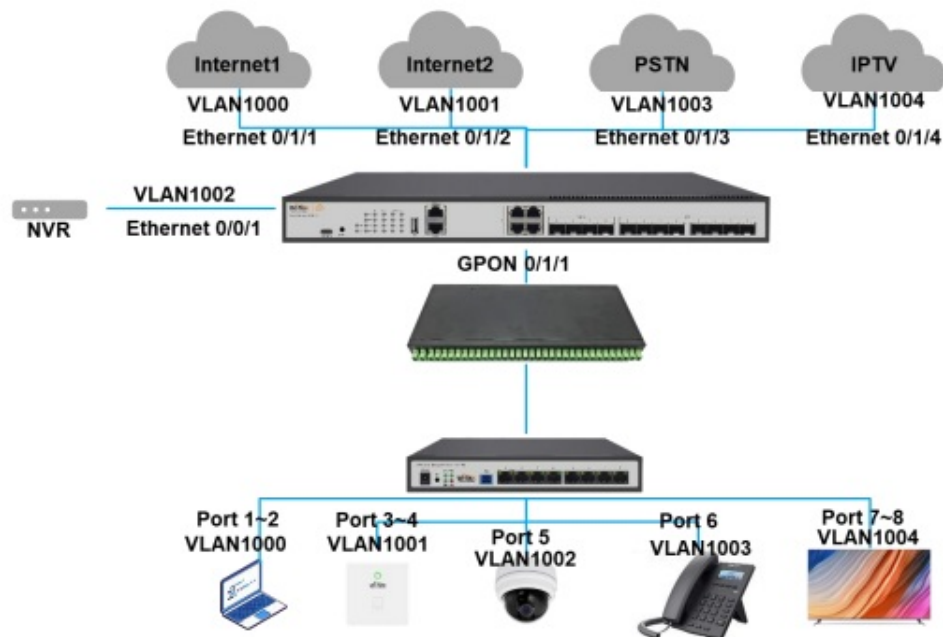
\*X= Fixed bandwidth, Y= Assured bandwidth, Z= Max bandwidth.

- **Type1:** The fixed bandwidth is completely reserved for a specific ONU or ONU for specific services. This portion of bandwidth cannot be used by other ONUs even when the ONU has no upstream service flow. Fixed bandwidth is mainly used for services that are very sensitive to service quality, such as TDM and VoIP.
- **Type2:** The assured bandwidth means assured bandwidth available when the ONU needs to use bandwidth. When the actual service traffic of the ONU does not reach the assured bandwidth, the DBA mechanism of the device should be able to allocate the remaining bandwidth to other ONU services. Due to the need for a DBA mechanism to control the distribution, its real-time performance is less than the fixed bandwidth.
- **Type3:** The combination type of assured bandwidth + max bandwidth, while ensuring the user has a certain bandwidth, it also allows the user to have a certain bandwidth preemption, but the sum does not exceed the maximum bandwidth configured by the user. This bandwidth is mainly used for VoIP services.
- **Type4:** The max bandwidth is the upper limit of the bandwidth that can be obtained when the bandwidth is used by the ONU, and the bandwidth resource used by the ONU is met to the greatest extent. This type is commonly used for IPTV and high-speed Internet access services.
- **Type5:** The combination type of fixed bandwidth + assured bandwidth + maximum bandwidth. It reserves fixed bandwidth resources that cannot be preempted by other users, ensures assured bandwidth when required, and allows users to preempt a certain amount of bandwidth, but the total amount does not exceed the maximum

bandwidth configured by users.

## Hotel Application

Take the following network topologies as typical hotel application scenarios:



Uplink service port	Server	VLAN
Ethernet 0/0/1	NVR	1002
Ethernet 0/1/1	Internet 1 for OLT and ONU cloud management and PC	1000
Ethernet 0/1/2	Internet 2 for AP	1001
Ethernet 0/1/3	PSTN server for VoIP	1003
Ethernet 0/1/4	IPTV server	1004

ONU Data planning for the 2nd floor of the hotel:

GPON Port	ONU ID /Eth Port	Data Type	VLAN	GEM ID	T-CONT	DBA
0/2/1	1/1~2	Internet	1000	1	1	1, pol_dba_Int, Type4, Max: 102400Kbps
	1/3~4	Wi-Fi	1001	2	1	1, pol_dba_Int, Type4, Max: 102400Kbps
	1/5	IP Camera	1002	3	2	2, pol_dba_ipc, Type3, Assured: 10240 Kbps , Max: 102400Kbps
	1/6	VoIP (SIP)	1003	4	3	3, pol_dba_voip, Type3, Assured: 1024 Kbps , Max: 10240Kbps
	1/7~8	IPTV	1004	5	4	4, pol_dba_ip tv, Type4, Max: 102400Kbps

A line-profile allows a maximum of 4 T-CONTs

The Wi-Fi service VLAN is overused by the Internet access service VLAN, the Wi-Fi service can overuse the data plan of the Internet access service.

### Configure the ONU to go online

#### Configure the DBA profile

DBA (dynamically allocates bandwidth) is used to configure uplink dynamic bandwidths. According to the GPON standard, the templates are TYPE1(fixed bandwidth), TYPE2(assured bandwidth), TYPE3(assured bandwidth + max bandwidth), TYPE4(max bandwidth), and TYPE5(mixed bandwidth).

**As planning, configure the dba profile as follow:**

- GPON> enable
- <GPON> system-view
- [GPON]dba-profile 1 name pol\_dba\_Int
- [GPON-dba-profile-1] type 4 max 102400
- [GPON-dba-profile-1] commit
- [GPON-dba-profile-1] quit
- [GPON]dba-profile 2 name pol\_dba\_ipc
- [GPON-dba-profile-2] type 3 assured 10240 max 102400
- [GPON-dba-profile-2] commit
- [GPON-dba-profile-2] quit
- [GPON]dba-profile 3 name pol\_dba\_voip
- [GPON-dba-profile-3] type 3 assured 10240 max 102400
- [GPON-dba-profile-3] commit
- [GPON-dba-profile-3] quit
- [GPON]dba-profile 4 name pol\_dba\_ip tv
- [GPON-dba-profile-4] type 4 max 102400
- [GPON-dba-profile-4] commit

- [GPON-dba-profile-4] quit

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Start a DBA profile	<b>dba-profile</b> { <i>index</i> [ <b>name</b> <i>name</i> ]   <b>name</b> <i>name</i> }	dba-profile 1 name pol_dba_Int
Configure a DBA profile as Type 1/2/3/4/5	<b>type 1 fix</b> <i>fixed_bw</i> [ <b>method</b> <i>sr</i> ] <b>type 2 assured</b> <i>assured_bw</i> [ <b>method</b> <i>sr</i> ] <b>type 3 assured</b> <i>assured_bw</i> <b>max</b> <i>max_bw</i> [ <b>method</b> <i>sr</i> ] <b>type 4 max</b> <i>max_bw</i> [ <b>method</b> <i>sr</i> ] <b>type 5 fix</b> <i>fixed_bw</i> <b>assured</b> <i>assured_bw</i> <b>max</b> <i>max_bw</i> [ <b>method</b> <i>sr</i> ]	type 3 assured 1024 max 10240
Save dba configuration	<b>commit</b>	
Query the DBA profile	<b>display dba-profile</b> { <i>index</i>   <i>name</i> <i>name</i> }	Display dba-profile 1

### Configure the VLAN profile

VLAN profiles are used to configure service vlan translation rules. the VLAN template needs to be referenced in the line profile or specific template.

**As planning, configure the dba profile as follow:**

- [GPON]vlan-profile 1 name pol\_vlan\_Int
- [GPON-vlan-profile-1] translate cvlan 1000 svlan 1000
- [GPON-vlan-profile-1] translate cvlan 1 svlan 1000
- // VLAN 1 is used for MDU cloud management. In general, do not use VLAN1 for other services to avoid conflict with service planning.
- [GPON-vlan-profile-1] commit
- [GPON-vlan-profile-1] quit
- [GPON]vlan-profile 2 name pol\_vlan\_wifi
- [GPON-vlan-profile-2] translate cvlan 1001 svlan 1001
- [GPON-vlan-profile-2] commit
- [GPON-vlan-profile-2] quit
- [GPON]vlan-profile 3 name pol\_vlan\_ipc
- [GPON-vlan-profile-3] translate cvlan 1002 svlan 1002
- [GPON-vlan-profile-3] commit
- [GPON-vlan-profile-3] quit
- [GPON]vlan-profile 4 name pol\_vlan\_voip
- [GPON-vlan-profile-4] translate cvlan 1003 svlan 1003
- [GPON-vlan-profile-4] commit
- [GPON-vlan-profile-4] quit



- [GPON]vlan-profile 5 name pol\_vlan\_ipvtv
- [GPON-vlan-profile-5] translate cvlan 1004 svlan 1004
- [GPON-vlan-profile-5] commit
- [GPON-vlan-profile-5] quit

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Enter/create vlan template	<b>vlan-profile</b> { <i>index</i> [ <b>name</b> <i>name</i> ]   <b>name</b> <i>name</i> }	vlan-profile 1 name pol_vlan_Int
Configure the vlan to add rules	<b>add inner-vlan</b> <i>vlan</i> [ <i>pri</i> ] <b>outer-vlan</b> <i>vlan</i> [ <i>pri</i> ]	add inner-vlan 10 outer-vlan 20
Configure default vlan rules	<b>default vlan</b> <i>vlan</i> [ <i>pri</i> ]	default vlan 10
Configure vlan conversion rules	<b>translate cvlan</b> <i>vlan</i> [ <i>pri</i> ] <b>svlan</b> <i>vlan</i> [ <i>pri</i> ]	translate cvlan 20 svlan 10
Configure vlan conversion and add rules	<b>translate-and-add cvlan</b> <i>vlan</i> [ <i>pri</i> ] <b>svlan</b> <i>vlan</i> [ <i>pri</i> ] <b>outer-vlan</b> <i>vlan</i> [ <i>pri</i> ]	translate-and-add cvlan 10 svlan 20 outer-vlan 100
Save Configuration	<b>commit</b>	
Viewing VLAN Templates	<b>display vlan-profile</b> { <i>index</i>   <b>name</b> <i>name</i> }	
View VLAN template binding information	<b>display vlan-profile bound-info</b> { <b>all</b>   <i>index</i> }	

### Configure the line profile

Line profiles are used to configure the ONT service flow mapping method, service flow processing policy and other related parameters.

**As planning, configure the dba profile as follow:**

- [GPON]line-profile 1 name pol\_line\_buildingA\_floor2
- [GPON-line-profile-1] model f0-s210
- [GPON-line-profile-1] tcont 1 dba-profile 1
- [GPON-line-profile-1] tcont 2 dba-profile 2
- [GPON-line-profile-1] tcont 3 dba-profile 3
- [GPON-line-profile-1] tcont 4 dba-profile 4
- [GPON-line-profile-1] gem 1 tcont 1 vlan-profile 1
- [GPON-line-profile-1] gem 2 tcont 1 vlan-profile 2
- [GPON-line-profile-1] gem 3 tcont 2 vlan-profile 3
- [GPON-line-profile-1] gem 4 tcont 3 vlan-profile 4

- [GPON-line-profile-1] gem 5 tcont 4 vlan-profile 5
- [GPON-line-profile-1] mapping 0 vlan 1 gem 1
- [GPON-line-profile-1] mapping 1 vlan 1000 gem 1
- [GPON-line-profile-1] mapping 2 vlan 1001 gem 2
- [GPON-line-profile-1] mapping 3 vlan 1002 gem 3
- [GPON-line-profile-1] mapping 4 vlan 1003 gem 4
- [GPON-line-profile-1] mapping 5 vlan 1004 gem 5
- [GPON-line-profile-1] port vlan 0 eth 1 default vlan 1000 [GPON-line-profile-1] port vlan 1 eth 2 default vlan 1000 [GPON-line-profile-1] port vlan 2 eth 3 default vlan 1001 [GPON-line-profile-1] port vlan 3 eth 4 default vlan 1001 [GPON-line-profile-1] port vlan 4 eth 5 default vlan 1002 [GPON-line-profile-1] port vlan 5 eth 6 default vlan 1003 [GPON-line-profile-1] port vlan 6 eth 7 default vlan 1004 [GPON-line-profile-1] port vlan 7 eth 8 default vlan 1004 [GPON-line-profile-1]
- commit
- [GPON-line-profile-1] quit

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Create/access line templates	<b>line-profile</b> { <i>index</i> [ <b>name</b> <i>name</i> ]   <b>name</b> <i>name</i> }	
Configuring the ONT type	<b>model</b> ont-model	mandatory
Configure tcont	<b>tcont</b> num <b>dba-profile</b> { num   <b>name</b> <i>name</i> }	mandatory
Configuring gemport	<b>gem</b> num <b>tcont</b> num [ <b>encrypt</b>   <b>priority-queue</b> queue   <b>downstream-profile</b> index   <b>upstream-profile</b> index   <b>vlan-profile</b> index ]	mandatory
Configuring the Flow Mapping Mode	<b>mapping mode</b> { <b>port</b> <b>port-priority</b>   <b>port-vlan</b>   <b>port-vlan-priority</b>   <b>priority</b>   <b>vlan</b>   <b>vlan-priority</b> }	Default VLAN-based mapping

Configuring Business Flow Mapping	<b>mapping</b> <i>index</i> { <b>vlan</b> <i>vlan</i>   <b>priority</b> <i>pri</i>   <b>port</b> { <b>eth</b> <i>eth</i>   <b>veip</b>   <b>iphost</b> } } <b>gem</b> <i>index</i>	mandatory
Configuring Business Flow Processing Policies	<b>port</b> <b>vlan</b> index { <b>eth</b> num   <b>iphost</b>   <b>ont</b> } { <b>default</b> <b>vlan</b> num [ <i>pri</i> ]   <b>transparent</b>   <b>vlan</b> num { <b>trunk</b>   <b>q-in-q</b>   <b>translate</b> } [ <b>vlan</b> num [ <i>pri</i> ] ] }	Configuration required for SFU, not required for HGUs
Configuring Downstream Multicast Flow Processing Policies	<b>multicast downstream</b> { <b>tag</b> num [ <b>port</b> num   <i>pri</i> ]   <b>untag</b> [ <b>port</b> num ]   <b>translate</b> <b>vlan</b> [ <b>port</b> num   <i>pri</i> ] }	

De-enable ONT multicast fast leave	<b>multicast fast-leave disable</b> [ port <i>num</i> ]	
Configure the ONT multicast learning number	<b>multicast group-limit</b> <i>num</i> [ port <i>num</i> ]	
Configuring ONT Multicast Mode	<b>multicast mode</b> { <b>igmp-snooping</b>   <b>olt-control</b> } [ port <i>num</i> ]	
Configure upstream multicast stream processing	<b>multicast upstream</b> { <b>tag</b> <i>num</i> [ port <i>num</i>   <i>pri</i> ]   <b>translate</b> <i>vlan</i> [ port <i>num</i>   <i>pri</i> ] }	
Enable ONT FEC/Loop Detection	<b>ont</b> { <b>fec</b>   <b>ring check</b> }	
De-enable port isolation	<b>ont port-switch</b>	
Configuring ONT Flow Control	<b>ont flow-control</b> [ port <i>num</i> ]	
Configure the maximum number of MAC learns for ONT	<b>ont mac-address-table max-mac-count</b> <i>num</i> [ port <i>num</i> ]	
Close the ONT CATV port	<b>ont shutdown</b> <i>ont-id</i> <b>catv-port</b> <i>num</i>	
Configuring the Mapping Mode	<b>qos-mode</b> { <b>gem-car</b>   <b>priority-queue</b> }	
Configuring ONT Port Speed Limiting	<b>port</b> <i>num</i> <b>egress cir</b> <i>cir</i> <b>pir</b> <i>pir</i> <b>cbs</b> <i>cbs</i> <b>pbs</b> <i>pbs</i> <b>pbs</b> <i>pbs</i>	
Binding alarm/multicast templates	<b>bind</b> { <b>alarm-profile</b>   <b>multicast-profile</b> } { <i>index</i>   <i>name</i> }	
Save Configuration	<b>commit</b>	
View line templates	<b>display line-profile</b> { <i>index</i>   <b>name</b> <i>name</i> }	
View line template binding information	<b>display line-profile bound-info</b> { <b>all</b>   <i>index</i> }	

## Configure the uplink service VLAN

- [GPON]vlan 1000,1001,1002,1003,1004
- [GPON-vlan-1000,1001,1002,1003,1004]quit
- // Create uplink VLANs in batches
- [GPON] interface ethernet 0/0/1
- [GPON-ethernet-0/0/1] port mode access
- [GPON-ethernet-0/0/1] port default vlan 1002
- [GPON-ethernet-0/0/1] quit
- // If the uplink port still needs to be tagged, set it to trunk. The command is
- // [GPON-ethernet-0/0/1] port mode trunk
- // [GPON-ethernet-0/0/1] port trunk allowed vlan 1,1002
- // [GPON-ethernet-0/0/1] quit
- [GPON] interface ethernet 0/1/1
- [GPON-ethernet-0/1/1] port mode access
- [GPON-ethernet-0/1/1] port default vlan 1000
- [GPON-ethernet-0/1/1] quit
- // If the uplink port still needs to be tagged, set it to trunk mode as shown in the example above.
- [GPON] interface ethernet 0/1/2
- [GPON-ethernet-0/1/2] port mode access
- [GPON-ethernet-0/1/2] port default vlan 1001
- [GPON-ethernet-0/1/2] quit
- [GPON] interface ethernet 0/1/3
- [GPON-ethernet-0/1/3] port mode access
- [GPON-ethernet-0/1/3] port default vlan 1003
- [GPON-ethernet-0/1/3] quit
- [GPON] interface ethernet 0/1/4
- [GPON-ethernet-0/1/4] port mode access
- [GPON-ethernet-0/1/4] port default vlan 1004
- [GPON-ethernet-0/1/4] quit

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Enter port view	<b>interface</b> {[ <b>ethernet</b> <i>interface-num</i> ]   <i>interface-name</i> }	
Set the port default vlan id	<b>port default</b> <i>vlan vlan-id</i>	The value of vlan-id ranges from 1 to 4094.
Restore port default vlan id	<b>undo port default vlan</b>	The default VLAN for the port is 1

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Enter port view	<b>interface</b> { { <b>ethernet</b> <i>interface-num</i> }   <i>interface-name</i> }	
Configure the port mode to access	<b>port mode access</b>	
Add the Access port to the specified vlan	<b>port default vlan</b> <i>vlan-id</i>	Access ports can only be in one VLAN, so set the port's default VLAN to add the access port to the specified VLAN.
Configure the port mode to Hybrid	<b>port mode hybrid</b>	
Add the Hybrid port to the specified vlan and set it to the tagged attribute	<b>port hybrid tagged vlan</b> { <b>all</b>   <i>vlan-list</i> }	You can join specific VLANs, or join to all VLANs, and these VLANs are tagged out on the outgoing ports.
Add the Hybrid port to the specified vlan and set it to the untagged attribute	<b>port hybrid untagged vlan</b> { <b>all</b>   <i>vlan-list</i> }	You can join specific VLANs, or join to all VLANs, and these VLANs are untagged out of the port.
Remove the Hybrid port from the specified vlan	<b>undo port hybrid vlan</b> { <b>all</b>   <i>vlan-list</i> }	
Configure the port mode to Trunk	<b>port mode trunk</b>	
Add the Trunk port to the specified vlan	<b>port trunk allowed vlan</b> { <b>all</b>   <i>vlan-list</i> }	
Remove trunk ports from a specified VLAN	<b>undo port trunk allowed vlan</b> { <b>all</b>   <i>vlan-list</i> }	

### Configure the OLT&ONU cloud management VLAN

- //There is DHCP-Client on vlan-interface 1 by default, the DHCP-client can be enabled on other vlan-interface only after when no interface is enabled.
- //[GPON]interface vlan-interface 1
- //[GPON-vlanInterface-1]undo dhcp-client
- [GPON]interface vlan-interface 1000
- Create vlaninterface successfully!
- [GPON-vlanInterface-1000]dhcp-client ipv4
- [GPON-vlanInterface-1000]quit
- [GPON]display dhcp-client

### Information of DHCP Client :

- IP Interface : VLAN-IF1000
- Version : IPv4
- Class ID : N/A
- Client ID : N/A
- Hostname : N/A

### Information of IPv4 Lease :

- State : done
- IP address : 192.168.111.128
- IP mask : 255.255.255.0
- Gateway : 192.168.111.1
- Server : 192.168.111.1
- DNS : 192.168.111.1
- Lease : 0d0h30m0s
- // OLT must require an IP address to be able to connect to the network in order to access the Wi-Tek cloud.
- [GPON]interface gpon 0/2/1
- [GPON-gpon-0/2/1]port default vlan 1000
- [GPON-gpon-0/2/1]quit

### Configure the ONT auto configure

- ONT auto-configuration is available when ONTs of the same type are brought online in batches. You need to enable the ONT auto-configuration function first and then configure the auto-configuration parameters. Different types of ONTs can
- be issued different line template configurations according to the Equipment ID. the OLT enables auto-configuration by default, and when an ONT is accessed, corresponding configurations are automatically issued according to the SFU or HGU
- type reported by the ONT.
- As planning, configure the dba profile as follow:
- [GPON] ont auto-config
- // Default is enable
- [GPON] ont auto-config 1 name buildingA\_floor2\_mdu equipment-id WI-POL308G-P line-profile 1
- //After the automatic online configuration is complete, you can connect the optical port of the MDU. The MDU automatically configures line-profile 1.

Manipulate	Command	Notes
Go to System View	<b>system-view</b>	
Enable ONT auto-configuration	<b>ont auto-config</b>	
Configuring ONT Auto Configuration Parameters	<b>ont auto-config { name <i>name</i>   number <i>num</i> } { all-ont   all-sfu   all-hgu   vendor <i>id</i>   equipment-id <i>id</i> } line-profile { index <i>id</i>   auto } [ interface <i>gpon</i> ]</b>	
Configure ONT for flexible configuration parameters	<b>ont auto-config { name <i>name</i>   number <i>num</i> } all-ont smart-match</b>	After the smart-match parameter is configured, the OLT generates a generic template for VLAN 1 and automatically issues the configuration of SFUs or HGUs based on the type of ONT reporting

## Review and Save the Configuration

- // Review the Configuration
- [GPON]display current-config
- !!!dba-profile
- dba-profile 1 name pol\_dba\_Int
- type 4 max 102400
- commit
- quit
- dba-profile 2 name pol\_dba\_ipc
- type 3 assured 10240 max 102400
- commit
- quit
- dba-profile 3 name pol\_dba\_voip
- type 3 assured 10240 max 102400
- commit
- quit
- dba-profile 4 name pol\_dba\_ipvtv
- type 4 max 102400
- commit
- quit
- !!!vlan-profile
- vlan-profile 1 name pol\_vlan\_Int  
translate cvlan 1000 svlan 1000
- translate cvlan 1 svlan 1000
- commit
- quit
- vlan-profile 2 name pol\_vlan\_wifi
- translate cvlan 1001 svlan 1001



- commit
- quit
  - vlan-profile 3 name pol\_vlan\_ipc
- translate cvlan 1002 svlan 1002
- commit
- quit
- vlan-profile 4 name pol\_vlan\_voip
- translate cvlan 1003 svlan 1003
- commit
- quit
- vlan-profile 5 name pol\_vlan\_ipvtv
- translate cvlan 1004 svlan 1004
- commit
- quit
- !!!line-profile
- line-profile 1 name pol\_line\_buildingA\_floor2
- model f0-s210
- tcont 1 dba-profile 1
- tcont 2 dba-profile 2
- tcont 3 dba-profile 3
- tcont 4 dba-profile 4
- gem 1 tcont 1 vlan-profile 1
- gem 2 tcont 1 vlan-profile 2
- gem 3 tcont 2 vlan-profile 3
- gem 4 tcont 3 vlan-profile 4
- gem 5 tcont 4 vlan-profile 5
- mapping 0 vlan 1 gem 1
- mapping 1 vlan 1000 gem 1
- mapping 2 vlan 1001 gem 2
- mapping 3 vlan 1002 gem 3
- mapping 4 vlan 1003 gem 4
- mapping 5 vlan 1004 gem 5
- port vlan 0 eth 1 default vlan 1000
- port vlan 1 eth 2 default vlan 1000
- port vlan 2 eth 3 default vlan 1001
- port vlan 3 eth 4 default vlan 1001
- port vlan 4 eth 5 default vlan 1002
- port vlan 5 eth 6 default vlan 1003
- port vlan 6 eth 7 default vlan 1004
- port vlan 7 eth 8 default vlan 1004
- commit
- quit
- !!!gpon-device

- ont-autofind interface gpon all
- ont auto-config
- ont auto-config 1 name buildingA\_floor2\_mdu equipment-id WI-POL308G-P line-profile 1 ont auto-config 1023 name AUTO\_CONFIG\_1023 all-ont smart-match
- !!!VLAN
- vlan 1000-1004
- quit
- interface ethernet 0/0/1
- port mode access
- port default vlan 1002
- quit
- interface ethernet 0/1/1
- port mode access
- port default vlan 1000
- quit
- interface ethernet 0/1/2
- port mode access
- port default vlan 1001
- quit
- interface ethernet 0/1/3
- port mode access
- port default vlan 1003
- quit
- interface ethernet 0/1/4
- port mode access
- port default vlan 1004
- quit
- interface gpon 0/2/1
- port default vlan 1000
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/2
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/3
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/4
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/5
- port hybrid tagged vlan 1-4094
- quit

- interface gpon 0/2/6
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/7
- port hybrid tagged vlan 1-4094
- quit
- interface gpon 0/2/8
- port hybrid tagged vlan 1-4094
- quit
- !!!OAM
- http enable
- !!!IF
- interface internal-interface 0
- ip address 192.168.168.1 255.255.255.0 quit
- interface vlan-interface 1000
- quit
- !!!DHCP
- interface vlan-interface 1000
- dhcp-client
- quit
- // Save the Configuration, it is very important, the configuration will be lost after restart if the configuration is not saved!
- [GPON]quit
- <GPON>save current-config
- Config in flash will be updated, confirm to do this?(y/n)[n]:y
- Start to do this, please wait...
- Save config successfully.

**After the above configuration is complete, the MDU is online. If there is need to configure more OLT functions, such as AAA and routing, refer to the CLI manual.**

## Documents / Resources



[Wi-Tek WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek](#) [pdf] User Manual  
 WI-POL5800-08, WI-POL308G-P, WI-POL5800-08 POL WLAN Solution OLT-Wireless Tek, WI-POL5800-08, POL WLAN Solution OLT-Wireless Tek, OLT-Wireless Tek

## References

- [User Manual](#)

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