

Protection switch group

This is only for model GPON OLT-422, OLT-824, OLT-1644 and XGSPON OLT-8XGS.

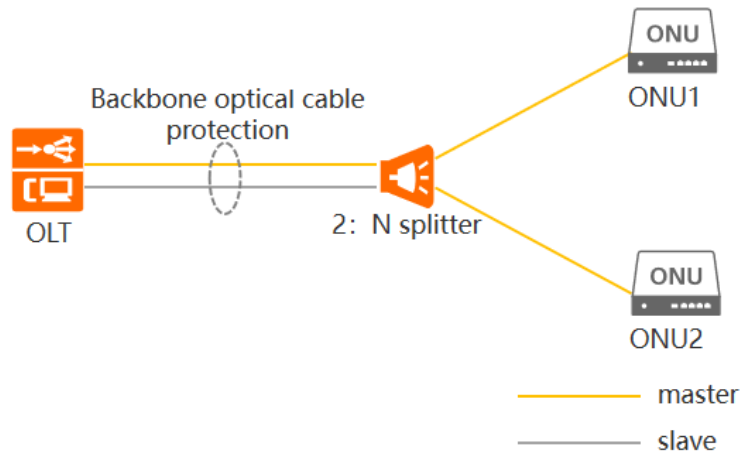
A) Single-Homing

(1) 2:N optical splitter(Type-B or Type-C)

To use this function you need a 2:N optical splitter, and one local OLT with 2 PON ports used as Master (Work) and a Slave (Standby).

(2) One OLT protection switch group connection example diagram.

This function is called Single-homing, One OLT is used with for example 2 PON ports in use. One PON port is master (Work) the other is Slave (Standby). Single-homing will protect only against an optical cable failure. When one of the ports or links fails, it automatically enables the other redundant port to continue working. It will not protect against equipment failures.



Setup Protection switch group Connection (One OLT)

(1) The web page

The screenshot shows the AirLive web interface for configuring a Protection Switch Group. The 'PON' menu item is highlighted in the left sidebar. The main configuration area is titled 'Protection Switch Group' and includes the following fields and options:

- Group Configuration:**
 - Protection Group Name: [text input]
 - Work Pon: [dropdown menu, value 1]
 - Standby Pon: [dropdown menu, value 1]
 - Buttons: [Submit], [Refresh]
- Manual Control:**
 - Group Name: [dropdown menu, value ad]
 - Active Pon: 8
 - Change Active Pon: [checkbox, unchecked]
 - Lock Mode: [checkbox, unchecked]
 - Revertive: [checkbox, checked]
 - Revertive Time: [text input, value 120] (60-3600s)
 - Button: [Submit]
- Protection Group Table:**

Index	Group Name	Work Pon	Standby Pon	Active Pon	Lock Mode	Revertive Mode	Revertive Time	Delete
1	ad	1	8	8	Not Lock	Revert	120	[trash icon]

[Refresh]

(2) Parameter Description

Protection Group Name: The group name you want.

Work PON: The working PON.

Standby PON: The standby PON will not light up when the working PON is normal.

Active PON: The working PON now.

Change Active PON: Usually, it does not need configuration. It can change the working PON.

Lock Mode: You can use this function to lock the working PON.

Revertive and Revertive time: You can use this function to automatically switch the working PON.

(3) Configuration steps

You will just need to configure the "Group Configuration", select the work PON and the standby PON you need, then it can work normally. If you need to configure more things, you can refer to the parameter introduction above.

Group Configuration

Protection Group Name	<input type="text" value="group1"/>
Work Pon	<input type="text" value="1"/> ▼
Standby Pon	<input type="text" value="2"/> ▼

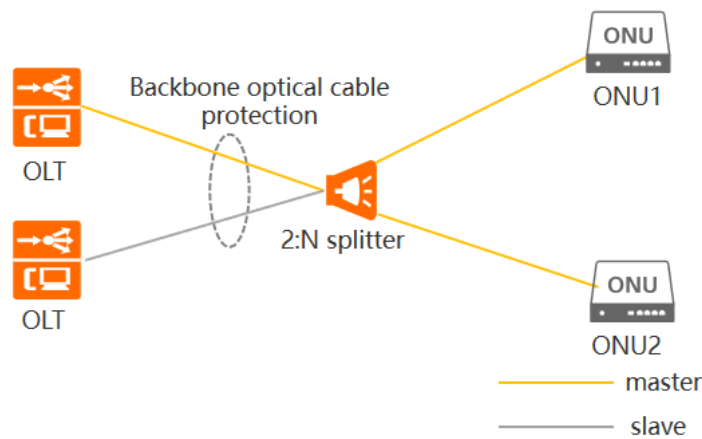
B) Dual Homing

(1) 2:N optical splitter(Type-B or Type-C)

To use this function you need a 2:N optical splitter, access to the local OLT and access to the remote OLT.

(2) Two OLT remote PON protection connection example diagram

This function is called Dual-homing, Two OLTs form a virtual device group, and each OLT has a downstream PON port that together forms a primary backup relationship, forming type B protection. Dual-homing can achieve device level and link level fault protection.



Setup Remote PON Protection (Two OLTs)

(1) The web page

The screenshot shows the AirLive web management interface. The top navigation bar includes 'Save', 'Log', 'Status', 'ONU list', and 'Logout'. The main menu on the left lists various configuration options, with 'PON' highlighted. The main content area is titled 'Remote Protection Switch Group' and contains the following sections:

- Remote Group Switch:** Remote Group Status is set to 'enable'. A 'Submit' button is present.
- Remote Group Configuration:** Protection Group Name is empty, Type is 'Type-B'. Local Pon is '1' and Remote Pon is '1'. IP Address fields are empty. A notice states: 'Notice: Local PON will be set to working status by default, and remote PON will be in standby status.' A 'Submit' button is present.
- Manual Control:** Group Name is empty, Active Pon is checked. Change Active Pon, Lock Mode, and Revertive are unchecked. Revertive Time is set to '(60-3600s)'. A notice states: 'Notice: Type-C protection groups not support manual control!'. 'Submit' and 'Refresh' buttons are present.
- Protection Group Table:** A table with columns: Index, Group Name, Local Pon, Remote Pon, Active Pon, Lock Mode, Revertive Mode, Revertive Time, Local IP, Remote IP, Type, Delete. A 'Refresh' button is below the table.

(2) Parameter Description

Remote Group Status: The function status.

Remote Group Status: The group name you want.

Type: The optical splitter (Type-B or Type-C).

Local PON: The local OLT used PON.

Local IP address: The IP of the local OLT.

Remote PON: The remote OLT used PON.

Remote IP address: The IP of the remote OLT.

Active PON: The working PON now.

Change Active PON: Usually, it does not need configuration. It can change the working PON.

Lock mode: You can use this function to lock the working PON.

Revertive and Revertive time: You can use this function to automatically switch the working PON.

(3) Configuration steps

Just need to configure the "Group Configuration", select the local PON and the remote PON you need, enter the local IP address and the remote IP address, then it can work normally. If you need to configure more things, you can refer to the parameter introduction above.

Notice: Local PON will be set to working status by default, and remote PON will be in standby status.

Remote Group Switch

Remote Group Status

Remote Group Configuration

Protection Group Name	<input type="text" value="group1"/>	Type	<input type="text" value="Type-B"/>
Local Pon	<input type="text" value="1"/>	IP Address	<input type="text" value="192.168.6.100"/>
Remote Pon	<input type="text" value="2"/>	IP Address	<input type="text" value="192.168.6.200"/>

Notice: Local PON will be set to working status by default, and remote PON will be in standby status.