



ONT Optical Parameter

- [Overview of ONT Optical Parameter, on page 1](#)
- [How to Configure ONT Optical Parameter, on page 1](#)
- [Configuration Example: Configuring ONT Optical Parameter, on page 3](#)

Overview of ONT Optical Parameter

The ONT Optical Parameter feature allows you to configure thresholds of the optical transmit (TX) and receive (RX) parameter of an ONT. When the received and transmitted optical power of the ONT is not within the threshold, an optical alarm is generated.



Note You should configure an alarm profile to set the threshold for the optical TX and RX power. You should also reference the alarm profile to the line profile for the alarm profile to take effect.

How to Configure ONT Optical Parameter

The following sections provide configuration information about ONT optical parameters.

Configure an Alarm Profile

To configure an alarm profile, perform this procedure.



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- Note**
- After the alarm profile is referenced by the line profile, modifying the alarm profile will cause the ONT to go online again.
 - When the alarm profile is referenced by the line profile, the alarm profile cannot be deleted directly.
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Procedure

	Command or Action	Purpose
Step 1	enable Example: Device> enable	Enables privileged EXEC mode. Enter your password, if prompted.
Step 2	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 3	deploy profile alarm Example: Device(config)# deploy profile alarm	Enters alarm profile configuration mode.
Step 4	aim {index_num [name name] name name} Example: Device(deploy-profile-alarm)# aim 5	Creates the alarm profile aim. <ul style="list-style-type: none"> • <i>index_num</i>: The index of the template. The range is from 0 to <i>M</i>, where <i>M</i> is the maximum number of supported ONTs. • <i>name</i>: The name of the template. The format is string. The string length range is from 1 to 128.
Step 5	optical power rx threshold {high rx_power low rx_power} Example: Device(deploy-profile-alarm-5)# optical power rx threshold high -10	Configures the threshold of the RX optical power. <i>rx_power</i> : The power rx threshold. The power value must be a multiple of 0.5 and unit value in dBm. The range is from 0 to 127.
Step 6	optical power tx threshold {high tx_power low tx_power} Example: Device(deploy-profile-alarm-5)# optical power tx threshold high 10	Configures the threshold of the RX optical power. <i>rx_power</i> : The power rx threshold. The power value must be a multiple of 0.5 and unit value in dBm. The range is from 0 to 127.
Step 7	active Example: Device(deploy-profile-alarm-5)# active	Activates the rule.

Reference an Alarm Profile to a Line Profile

To reference an alarm profile to a line profile, perform this procedure.

Procedure

	Command or Action	Purpose
Step 1	enable Example: Device> enable	Enables privileged EXEC mode. Enter your password, if prompted.
Step 2	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 3	deploy profile line Example: Device(config)# deploy profile line	Enters line profile configuration mode.
Step 4	aim {index_num [name name] name name} Example: Device(deploy-profile-line)# aim 5	Creates the line profile aim. <ul style="list-style-type: none"> • <i>index_num</i>: The index of the template. The range is from 0 to <i>M</i>, where <i>M</i> is the maximum number of supported ONTs. • <i>name</i>: The name of the template. The format is string. The string length range is from 1 to 128.
Step 5	alarm profile refer {index_num name name} Example: Device(deploy-profile-line-5)# alarm profile refer 1	Refers the alarm profile to the line profile.
Step 6	active Example: Device(deploy-profile-line-5)# active	Activates the rule.

Configuration Example: Configuring ONT Optical Parameter

The following example shows how to configure an alarm profile:

```
Device> enable
Device# configure terminal
Device(config)# deploy profile alarm
Device(deploy-profile-alarm)# aim 1
Device(deploy-profile-alarm-1)# optical power rx threshold low -30 high -3
Device(deploy-profile-alarm-1)# optical power tx threshold high 5 low 0
Device(deploy-profile-alarm-1)# active

Device(deploy-profile-alarm)# deploy profile line
Device(deploy-profile-line)# aim 1
```

```
Device(deploy-profile-line-1)# alarm profile refer 1
Device(deploy-profile-line-1)# active
```

The following example shows how to reference an alarm profile to a line profile:

```
Device(deploy-profile-alarm)# deploy profile line
Device(deploy-profile-line)# aim 1
Device(deploy-profile-line-1)# alarm profile refer 1
Device(deploy-profile-line-1)# active
```