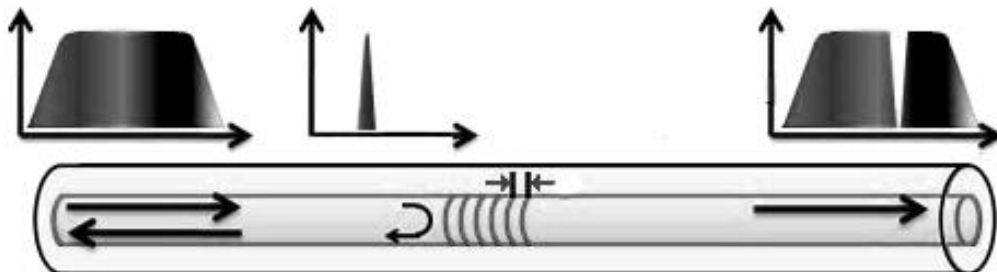


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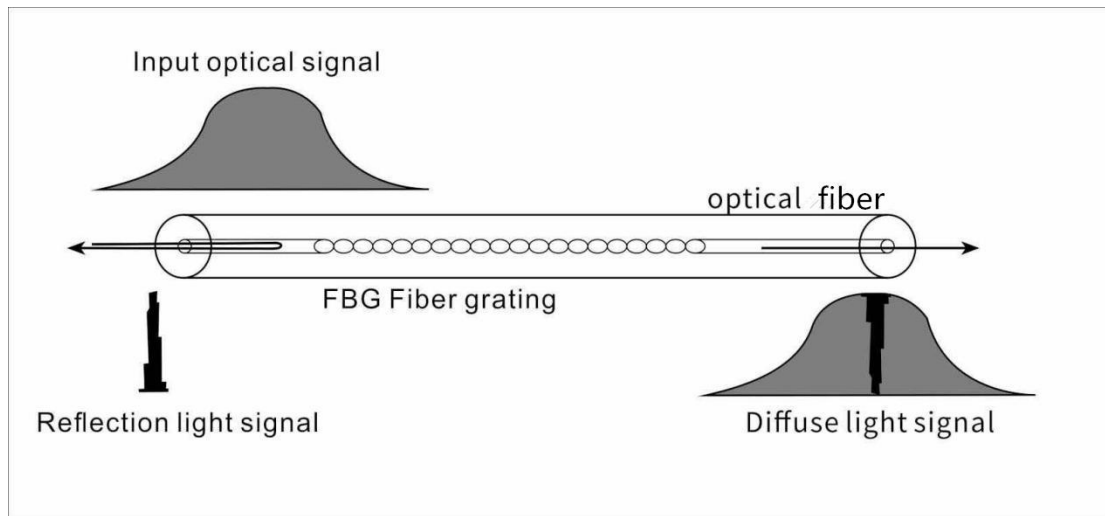
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## Product Description:

Optical Grating Reflector is installed on the user terminal distribution network using fiber grating. Using grating, it can reflect the fiber line signal (1625nm  $\pm$ 5nm,  $\pm$ 10nm, or 1650  $\pm$ 5nm,  $\pm$ 10nm). As long as the reflected light measurement system is connected to the optical fiber network splitter front. When detecting the center wavelength, the user end of the optical fiber connection is normal. If the center wavelength of which does not exist or the reflection of value is low, it shows the user end fiber is damaged or fractured. And it need maintenance. Then it can achieve the goal which the fiber line is online and rapid detection. And other communication wavelength which is not on the fixed reflection wavelength of fiber grating, will pass normally by low loss and will not affect the normal communication.

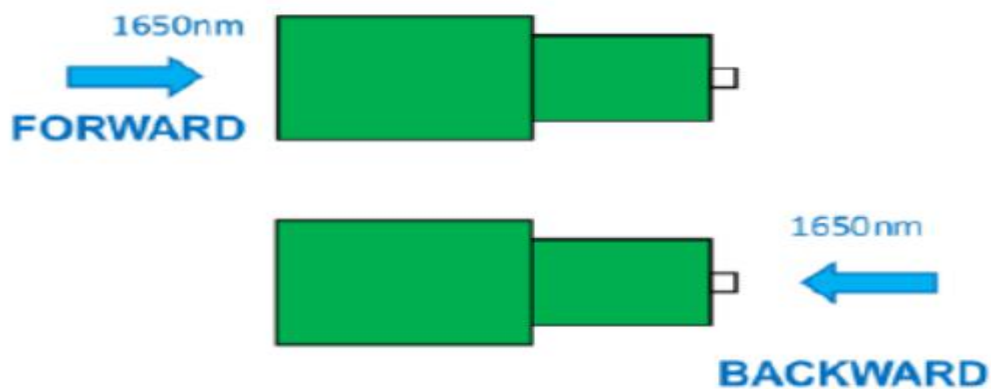


## Schematic Diagram:



## Product Type:

The device is used on the FTTH network to set and monitor a specific point of the network usually on the customer side. We can define the signal direction in the required device as follow:



**Figure 1: Signal directions**

A Monodirectional FBG Reflector is defined as the FBG based device that maintain all the transmitting values in line with the given datasheet only when the 1650 signal direction is the “FORWARD” one.



A Bidirectional FBG Reflector is defined as the FBG based device that maintain all the transmitting values in line with the given datasheet when the 1650 signal direction is on the “FORWARD” on “BACKWARD” sides.



For both device all over the Passband WL the device must be in line with datasheet over both signal sides ( “FORWARD” and “BACKWARD” )

## Technical Parameters:

	Parameters	Unit	Min.	Typ.	Max.
1	Pass band wavelength range	nm	1260-1625		
2	Reflect band wavelength range	nm	1644.5-1655.5		
3	IL(1260nm~1360nm)	dB			1.2
4	IL(1460nm~1610nm)	dB			1.2
5	IL(1610nm~1625nm)	dB			3
6	IL(REFLECT BAND)	dB	21		
7	RL(1260nm-1360nm)	dB	32		
8	RL(1460nm-1610nm)	dB	32		
9	RL(1610nm-1625nm)	dB	20		
10	RL(REFLECT BAND)	dB			1.0
11	PDL	dB			0.4
12	Ripple(REFLECT BAND)	dB			0.6
13	TDL	dB			0.5
14	Max Optical Power Handling	dBm	27		
15	Plug Times		500		
16	Connector	SC/APC Male & SC/APC Female			

## Working Range:

Parameters	Unit	Min.	Typ.	Max.
Storage Temperature	℃	-40		85
Operating Temperature	℃	-25		65
Storage Relative Humidity	%	5		95
Operating Relative Humidity	%	5		95

## Features:

- High stability
- High reflectivity of monitoring signal
- Real-time line monitoring
- Low loss communication signal
- Application of FTTH Engineering
- Adapter structure, easy and convenient connection
- Small temperature characteristics
- Meet ROHS

## Application:

CATV	Metro	Test Equipment
Active Device Termination	Local Area Networks(LANs)	Premise Installations
Telecommunication Networks	Data Processing Networks	Wide Area Networks(WANs)

## Application Scenario:

During project engineering, optical fiber carriers use a reflector and the Field Assistant to check installation by phase, thereby implementing comprehensive ODN quality acceptance.

CO engineers confirm acceptance results and create a data file of the optical fiber network project and maintain the file, which supports fast fault demarcation and location during follow-up operation.

