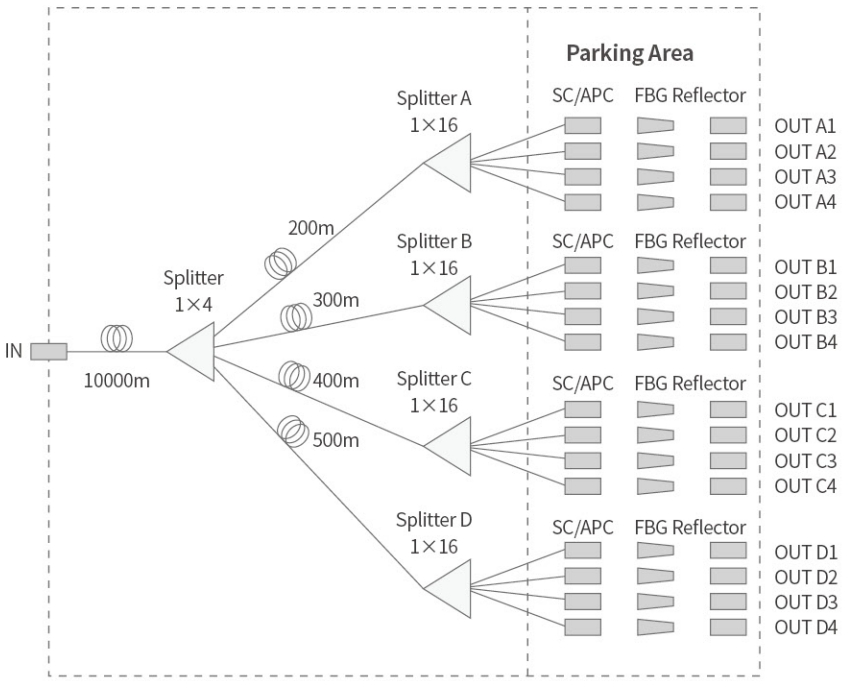
Fibre Link Component

OTDR FBG Reflector

OTDR FBG Reflector is based on Fiber Bragg Grating technology with wide bandwidth and low insertion loss to reflect OTDR test signal. When the optical measurement system generates a certain range of wavelength to a Passive Optical Network (PON) which can pass through the FBG, the FBG will reflect its own intrinsic reflection wavelength at 1644.5nm - 1655.5nm.

Characteristics

- High precision of reflectance at test wavelength
- Low insertion loss at traffic wavelength
- Easy to install
- Exceptional reliability and environmental stability
- Applicable for FTTH, FTTB, FTTC
- Compatible with GPON, EPON, GEPON, 10GEPON, NGPON



Applications

- Create high reflectance and wide working bandwidth at the termination of a PON without disturbing traffic
- Test the reflectance from the central office.
- Check optical continuity of a subscriber when being added, or when troubleshooting

Specifications

Product Type	REF-1650-XX-XX*①	
Parameters	**Minimum**	**Maximum**
Optical Parameters		
Pass band wavelength range (nm)	1260	1625
Reflect band wavelength range (nm)	1644.5	1655.5
Insertion Loss (1260nm - 1360nm) (dB)*②	-	1.0
Insertion Loss (1460nm - 1600nm) (dB)	-	1.0
Insertion Loss (1600nm - 1625nm) (dB)	-	2.0
Insertion Loss (Reflect Band) (dB)	21	-
Return Loss (1260nm - 1360nm) (dB) *③	35	-
Return Loss (1460nm - 1580nm) (dB)	35	-
Return Loss (1580nm - 1620nm) (dB)	30	-
Return Loss (1620nm - 1625nm) (dB)	20	-
Return Loss (Reflect Band) (dB)	0	1
Polarization Dependent Loss (1260nm - 1600nm) (dB)	0	0.6
Ripple (Reflect Band) (dB)	0	0.4
Temperature Dependent Loss (1260nm - 1600nm) (dB)	0	0.5
Max Optical Power Handling (dBm)	27	
Plug Times	500	-
Connector	SC/APC Male & SC/APC Female	
Temperature Range		
Storage Temperature (℃)	-40	85
Operating Temperature (℃)	-25	65
Relative Humidity (RH%)	5	95

*①REF-1650-XX-XX, the first XX means fibre type, the second XX means structure type
*② Insertion Loss (dB) = -10 log (Output Power/ Input Power) [dB]
*③Reture Loss (dB)=-10 log (Reflected Power/ Input Power) [dB]. To measure the return loss of reflect band, the light of 1650nm should be injected from the female side of reflector