receiving power is larger than +2dBm, the yellow indicator lights on to show the optical signal is too high. When the light receiving power is less than -15dBm, the red indicator lights on to show the optical signal is too small. If the light receiving power is in the range of +2 ~ -15dBm, the green indicator lights on to show the optical signal is receiving normally.

PON：PON port connect next to ONU，please don't take off the port cover when no use.

4. Install Test Matter Need Attention

4.1. FWR-8610W device is indoor type structure, not to be used in place of harassment by the rain; Packed in the box of the indoor appropriate space for cooling. The output of the cable shielding network must be grounded, grounding resistance should be less than 4 Ω. The local power supply for electrical shell has to be grounded above ground resistance.

4.2. Patch cord fiber input and output cable has to be reserved certain use, FWR-8610W device is with SC/APC, PON link with SC/APC.

5.Attachment

Name	Model	QTY	Notes
Optical Receiver	FWR-8610W	1	Main Device
Power Adapter	DC5V 500mA	1	IN：AC100～240V
Instructions		1	Included CQ

6.Certification

Certification			
Checker	J8	DATE	

FWR-8610W

FTTH WDM OPTICAL RECEIVER

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FWR-8610W WDM Optical Receiver Instructions

1. Introduction

Fiber to the home (FTTH) broadband access is the ultimate development goal, FWR-8610W optical receiver is the target terminal products for this goal. FWR-8610W device adopts technology of high isolation WDM in order to separate CATV and ONU signal. Furthermore, it also adopts low optical power receiving and RF-AGC control technique, which could achieve the requirement of ≤-2dBm CATV receiving for FTTH. The optical power receiving monitoring indicator LED (≥-15dBm) is provided on the panel and it supports RF outputs constantly, convenience of customer's use, which is the ideal receiver equipment for FTTH.

2、Main Performance Parameters

Item		Unit	Performance Parameter
Optical characteristic	Input Wavelength	(nm)	1310/1490,1550
	Output Wavelength	(nm)	1310/1490
	Operating Wavelength	(nm)	1540～1650
	Channel Separation	(dB)	≥40（1310/1490nm+1550nm ）
	Response	(A/W)	≥0.9
	Receive Power Range	(dBm)	-2～-18
	Reflection Loss	(dB)	≥55
	Fiber Connector	/	SC/APC
	PON Connector	/	SC/APC
RF characteristic	Bandwidth/ Flatness	MHz/dB	47-1000/≤±1
	Output Level	dBuv	AGC: 82±1/(-2～-12dBm)
	Reflection Loss	dB	≥14（75Ω characteristic impedance）	
	RF Output Interface	/	Inch (one way output)	
	CNR	dB	≥44	(-9dBm receiving,PAL-D 60CH,OMI3.8%)
	CTB/CSO	dB	≥55/≥55	
	MER(Closed Equalization)	dB	≥25(64QAM) ≥31(256QAM)	-12dBm Reception, Optical Link 94 Digital Channels
	MER(Open Equalization)	dB	≥32(64QAM) ≥34(256QAM)	
	Bit Error Rate(BER)	/	≤1×10-4	Measure at Least 100Bits
Other requirement	Power Supply/ Consumption	V/W	External AC100～240V→DC5/5	
	Working/Storage Temperature	℃	-35～50/-40～75(humidity 5～90%)	
	Dimension	mm	80×55×25	

3. Direction for Use

3.1 Power Input

POWER IN：FWR-8610W is the external power supply input port, first should be the DC+5 V external voltage stabilizer output line connected to the device POWER IN, then put DC+5V external mano-stat insert 100/240V, DC5V face posted power light, show power part is regularly working.

3.2 Optical Fiber Input

OPTICAL IN：FWR-8610W is input interface of optical signal, in optical access should clean APC TOP by alcohol, then align adapter sunken mouth, fiber mouth march link. When the light