

PR6000 FTTH 1550 Optical Receiver



1. Introduction

.Fiber to the home (FTTH) broadband access is the ultimate development goal, FTTH (1550) optical receiver is the target terminal products for this goal. The machine adopts double wave plate optical receiver and RF-AGC control technique, can achieve the requirement of FTTH 1550nm single wavelength of CATV receiving . The machine is provided with the optical power receiving monitoring indicator LED (2 ~ 9dBm) on the panel, RF firm output, convenience of customers use, which is the ideal receiver equipment for FTTH.

2. Main Performance Parameters

| | Item | Unit | Performance Parameter |
|------------------------|-----------------------------|--------|-------------------------------------|
| Optical characteristic | CATV operation wavelength | (nm) | 1540~1560 |
| | channel separation | (dB) | ≥40 (1310nm and 1490nm) |
| | response | (A/W) | ≥0.9 |
| | receive power range | (dB) | -12~+3 |
| | reflection loss | (dB) | ≥55 |
| | fiber linker | / | SC/APC |
| RF characteristic | Bandwidth/flatness | MHz/dB | 47-1000/±1 |
| | output level | dBuV | 76±1/(-12~-2dBm) |
| | output level adjustment | dB | 0~-18 |
| | reflection loss | dB | ≥14 (75Ω characteristic impedance) |
| | RF output interface | / | Metric or Inch (request when order) |
| | CNR | dB | -6dBm/≥47(NTSC80CH,OMI3.8%) |
| | CTB/CSO/HUM | dB | -6dBm/≥70/≥66/≥60 |
| Other requirement | power supply/consumption | V/W | External AC155~255V→DC12,/5 |
| | working/storage temperature | ℃ | -25~50/40~75 |
| | working/storage humidity | % | 5~95 (no condensation) |
| | size | mm | 130×60×22 |

3. Direction for Use

3.1 Power Input

POWER IN: It is the external power supply input port, First should be the DC+12 V external voltage stabilizer output line connected to the machine POWER IN,than put DC+12V external mano-stat insert 100/240 V,DC12V Face posted power light, show Power part is regular work.

3.2 Optical Input

OPTICAL IN: It is input interface of optical signal,In optical access should be clean APC TOP use alcohol ,than align adapter sunken mouth、 fiber mouth march link;When light signal access, face OPTICAL ($\geq -12\text{dBm}$) light, show Power part is regular work.

3.3 RF Output Level Adjustment

RF OUT: It is F output pot,when optical input $+2\sim -12\text{dBm}$,RF output $76\text{dBuV}\pm 1$; ADJ: it is RF Output level decay, quantity has transferred to the minimum.When the output level and the design requirements has any deviation,Can adjust the attenuation amount, with the design requirements.This machine is low optical power receive, suggest $-8\sim -6\text{dBm}$ advisable.

4. Install Test Matter Need Attention

4.1. This machine 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 $4\ \Omega$,The local power

supply for electrical shell has to be grounded,Above ground resistance.
4.2. Tail fiber input and output cable has to be reserved certain length,Reduce accident's occurrence; optical interface do not move if not use, This machine is with SC/APC,do not link with SC/APC.

5. Attachment

Outlay power supply, AC100~240V DC12V 500mA 1PCS

Оптичен приемник, проектиран специално за FTTH (оптика до в къщи) приложение, със вграден входен филтър за само 1550nm дължина на вълната, Филтъра подтиска останалите дължини на вълната (1310 и 1490nm с 40dB, което е достатъчно за осигуряване на качествен ТВ сигнал. Подходящ за EPON и GPON мрежи, ползващи едно влакно за данни и TV, с използване на само PLC сплитери, без нужда от WDM. Разполага с автоматичен контрол на усилването (AGC), който осигурява постоянно изходно ниво на RF сигнала от 76 dBuV (достатъчно за едно домакинство), при входно ниво от само -12 dB. Захранва се с адаптер на 12 VDC, с много ниска консумация.