5.installation precautions

5.1. In case inside, chassis grounding resistance shell must be ground, should be less than 4Ω, The shell feed for electrical grounding resistance must be grounded, alexandrine, also requires cable, for electrical outside shell and the machine shell in the same position, pick up the utility power supply must be first chassis grounding later power supply.

5.2 Fiber or stern line input and output must reserve a certain length of cable, lest too tight cause failure.

5.3 RF distribution when using only 1 as output signal, the another one Ω must be grafted in 75 road port false load.

5.4. when light power and the design value is error, should check whether adaptation in optical link connector optical power value displayed, optical power differ -0.3 dB is a normal.

Notes: device specification: 1×108 or 2×104dBuV ■

1×104 or 2×100dBuV □

1×102 or 2×98dBuV □

Optical Linker: FC/APC ■ SC/APC □ LC/APC □

EOC Access: 5-30MHz □ 5-65MHz □

OR8000 Mini Optical Receiver

Optical Control AGC、WEB Network Management

1. Introduction

GS10040S Building Optical Receiver is designed as a low power optical receiving

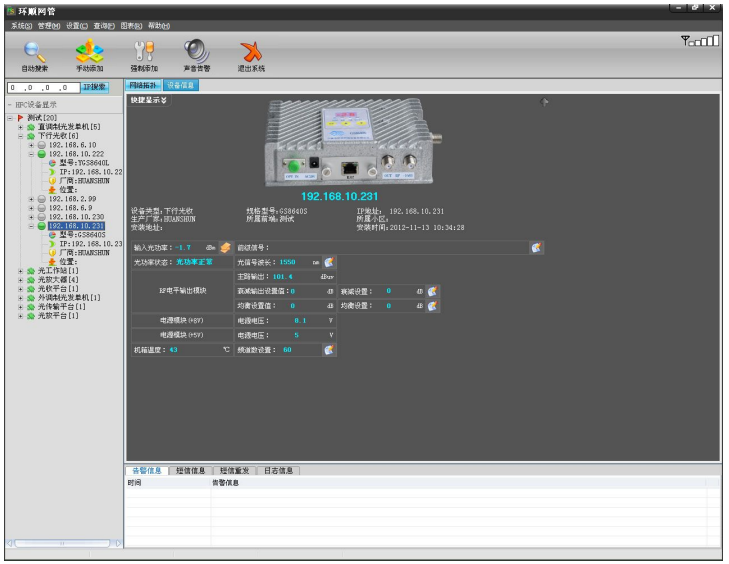
device for adapting “Fiber To The Building” (FTTB). This device adopts high sensitive optical phototube, low noise gallium arsenide amplifier chip in preposition and gallium arsenide push-pull amplifier circuit in last stage which provides maximum output level over 2×104dBuV. Additionally, high-precision lightning-protection anti-surge linear power supply, AGC automatic output level control and digital display of optical receiving and RF output level are configured in this device. Due to the superior performance of main material and well-designed circuit, it guarantees the performance index and better reliability of this complete device. Moreover, optional network management transponder which supports WEB and HFC network management monitoring and duplexer are added into this device in order to resolve the problem of operator device management or EOC plug in.

2. Main Performance Parameter

Items	Unit	Performance Parameter
OpticalWavelength/Interface	nm	1300～1560nm，SC or FC/APC
Return Loss	dB	≥48（APC face）
Optical Power Input Range	dBm	-9～+2dBm（-3～-4dBm receiving suggested）
Frequency Range/Flatness	MHz/dB	45～1000/±0.75
RF Output Level	dBuV	1×108 or 2×104，1×104 or 2×104
EQ Output Noise Current	PA/√Hz	≤8
AGC Specs	dB	-7～+2dBm/Nominal Output Level±1
C/N（-1dBm receive）	dB	≥52
CTB/CSO	dB	68/70（as 2×104）
Output Attenuation/EQ	dB	0～18（7～9 dB vice EQ suggested）
RF Port Return Loss	dB	≥16（45～862MHz）
RF Output Connector		FL-10 Metric or Inch
Operation/Storage Temperature	℃	-30～+60/-40～+75
Power Supply/Consumption	V/W	160～260V 或 35～75V convert DC8V/10
EOC Insertion Loss	dB	≥1（5-30/65MHz）
Ability of Anti-lightning	Kv	5
Outline/Installation Size	mm	180×130×47/162（Φ4～Φ5）

4.2 HFC Network Management Instruction

Installing standard HFC network management system application software into server in that network, it would realize monitoring real operation condition of device when running that network system. As shown below：



Please refer to HFC network equipments system specification book.

4.2.3 Threshold Settings

Five parameter of device can set threshold. Each parameter has 4 alarm threshold value, 4 alarm function and 1 dead zone value.

It would not occur Trap alarm between lowest to highest alarm threshold value. On the other hand, it occurs Trap as thought of operation abnormal when parameter is lower than lowest threshold value or higher that highest alarm threshold value.

Each parameter has 4 alarm function and optioned function will report Trap when parameter operates abnormal. Customer can set alarm function according to different requirement.

Dead Zone Value：After Trap alarm, parameter recovers to the range of alarm limit and absolute value with alarm limit is bigger than dead zone value, then alarm will be removed. As shown below：

4.2.4 Software Update

Software update control program or version through network remoteness. Click ‘Update Mode’, entering update interface and then choosing file to update.

If no update, please do not click ‘Update Mode’as cannot back to main menu.

Please restart device if has done already.

As shown below：

3. Direction For Use

3.1 Function Instruction

Input Power In WEB Output Main Output

Screen：Display each function parameter, auto close after 60 seconds, start while pressing any button.

Power In：External Power AC9V In，the screen light ’---’ turns on when power connected in，which shows device is working properly; input level light flicks if no optical signal inputs optical power.

Optical Signal Input：Pigtail connecting in corresponding optical connector and clean it by over 95% alcohol before connecting；When optical signal in, related optical power will be displayed in screen in unit of dBm. At this time, output level light turns off when CATV carriers wavelength in optical signal, otherwise, green light flicks.

Transponder: Directly apply WEB while connecting with PC or realize devices monitoring via network.

Main and Branch Output：If the inside port of standard of branch output is main output, outside port is -20 branch port; inside port of branch output is output 1 and output2.

Set Button：Function Button is formed of set, up and down button, which can complete the setup of channel, EQ and output level. When channel statue lights on and channel number is displayed in screen after press, channel number can be adjusted based on actual number with up and down button; when EQ statue lights on and EQ vaule displayed, it can be set based on design and EQ is suggested in 6 to 10 dB properly as reference as 50MHz level;When output level lights on and output level is displayed, attenuation can be adjusted bigger if level is thought be bigger.

-20dB Detection: This port is -20dB detection port and can be used for EOC insertion. The frequency is low 5 to 30 or 5 to 65 MHz.

3.2 Using Direction

Starting optical signal connecting as interface function, corresponding optical receive power blue light turns on, display directly shows dBm optical power; Adjust as channels, EQ and RF output level. According to actual channels, adjusting number of channels and accuracy of output level is related to channel setting as more closer tends to more accurate; RF output level is related to optical input power and optical modulation, it can reduce attenuation when output is too big in order to satisfy your level requirement; If RF output needs vice EQ, adjusting EQ value and it will efficiently improve non-linear parameter.

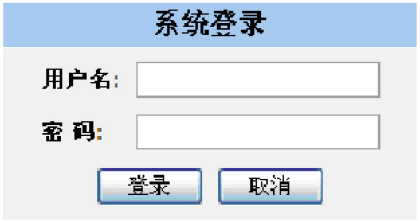
4、Network Management Function Application（Optional）

This device has network management function after installed transponder which supports WEB browser. As IP or admin IP address connects to PC, it can inquire or change related content through WEB browser.

4.1 Web Interface Instruction

4.1.1 Web Login

Typing IP address of transponder in IE browser address line. Clicking ‘Enter’ button to login. As shown below



Admin IP Address：192.168.6.9

Admin Account：admin

Admin Password：admin

Notes：If PC address is not in the same network segment with device，it needs to add that IP of segment in PC. For example, admin IP of device is 192.168.6.9, IP of PC needs to change to 192.168.6.XXX and gateway changes to 192.168.6.1.

4.1.2 Web Management

After login WEB, there will be system management, operation statue, alarm, configuration, threshold setting, SNMP, public information, update and etc options in the left menu. Two simple option will be introduced below.

（1）Operation Statue Information

Display main operation parameter of device, refresh time can be selected. As shown below:

（2） Alarm

Current Alarm：current device trigger Trap alarm information.

History Alarm：the alarm record of device. It will cover previously created alarm information after 16 alarm record.As shown below：