

SUN5000D Optical Transmission Platform

SUN5000D optical transmission platform is a intensive dedicated system equipment used in all kinds of photoelectric signal transmission for HFC network. Provide a transmitting and receiving integration platform for CATV headend and sub-headend.

Features

- 19" 4U in size and is easy to install.
- Compatible all kinds of receiver, transmit and return module working together, configuration flexibility , plug and play for all function module .
- Multi-system combination, transmit, little space
- Inside CPU monitor all module working status, and accurate display system working parameter by VFD screen
- Intelligent fan design, effective control inside temperature rise, extending fan working life.
- Primary/spare power supply structure, adopt heat backup mode improve system reliability.
- Sound and light alarm when abnormal working state.
- Rear RJ45 interface realizing remote real-time condition monitoring, and update software online.
- Front RJ45 interface realizing software updating and test debug function.

Item	Name	Quantity	Remark
SUN5000D	Optical transmission platform frame (Including SUN5310C controller module, display key unit)	1	Necessary
WN370T220A	System power supplier	1	Necessary
WN370T220A	System power supplier (back-up)	1	Optional (suggested)
5311TB	Forward transmitter module	1~16	Optional #
SUN5311TC	Forward transmitter module	1~16	Optional #
SUN5311RB	Forward optical receiver module	1~16	Optional #
SUN5361RB	Return optical receiver module	1~16	Optional #
SUN5355A	Optical fiber amplifier module	1~16	Optional #

Note: 1 optical transmission platform with 16 pcs module plug-in slots, so it max for 16 module working at the same time.

Specifications

SUN5311TB Forward transmitter module

SUN5311TB	SUN5311 TB-06	SUN5311 TB-08	SUN5311 TB-10	SUN5311 TB-12	SUN5311 TB-14	SUN5311 TB-16	SUN5311 TB-18	SUN5311 TB-20
Output Optical Power (dBm)	6	8	10	12	14	16	18	20
Expected Link Loss (dB) Note1	9.8	11.0	12.0	12.7	13.5	14.0	14.6	15.0
Optical Wavelength (nm)	1310±20							
Connector	SC/APC or FC/APC							
Optical Return Loss (dB)	>45.0							
Bandwidth	47-750/862/1000MHz							
RF Input Return Loss (dB)	>=16dB(47-550MHz) > =14dB(550-750/862/1000MHz)							
Flatness (dB)	±0.75							
AGC Arrange (dB)	>±5							
RF Input (dB)	-20(Relative to the input signal level)							
Test Port (dBμv)	75±2							
C/N (dB) Note2	>=51.0							
CSO (dB) Note2	>=60.0							
CTB (dB) Note2	>=65.0							

Note1: Expected link loss value is 10Km optical fiber add passive loss.

Note2: C/N 、CTB 、CSO are test meet the situation of expected link. Test with 98 channel signal generator, the output level of front 59 channels (47~550MHz) is 80±0.5dBuV, the output level of the rest 39 channels (550~750 MHz) is 70±0.5dBuV. Test regardless of the distortion from the receiver.

SUN5311RB Forward optical receiver module

Receive Optical Wavelength (nm)	1100~1600
Optical Connector	SC/APC
Receive Optical Power Range (dBm)	-10~+3dBm (typical value : -1dBm)
Broadband (MHz)	47~1000
RF output maximum level (dBμv)	102
RF output reflection loss (dB)	>=16(47~550MHz) >=14(550~1000MHz)
Flatness(dB)	±0.75
TEST port level(dB)	-20dB Output signal level
C/N(dB) Note	>=51.0
CSO(dB) Note	>=60.0
CTB(dB) Note	>=65.0

Note :

Test with standard optical transmitter, and under it's expected link loss value

Test with output level from 98 channels signal generator, the output level of front 59 channels (47~550MHz) is 80±0.5dBuV, the output level of the rest 39 channels (550~750 MHz) is 70±0.5dBuV

Receive optical power is -1dBm,RF output level is 98dBuV °

SUN5361RB Return optical receiver module

Optical Wavelength (nm)	1290-1620
Connector	SC/APC or FC/APC
Optical Return Loss (dB)	>50
Bandwidth	5-100MHz
RF Output Signal Level (dBμv)	>=70(-21dBm receiving)
RF Output Return Loss (dB)	>=16
Flatness (dB)	±1.0
Test Port Level	-20dBm Output Signal Level
C/N (Db)	>=51.0
CSO (dB)	>=60.0
CTB (dB)	>=65.0

SUN5355A Optical fiber amplifier module

SUN5355A	5355A	5355A	5355A	5355A	5355A	5355A	5355A	5355A	5355A
	-14	-15	-16	-17	-18	-19	-20	-21	-22
Output Optical Power (dBm)	14	15	16	17	18	19	20	21	22
Input Optical Power (dBm)	-3 ~ 10								
Optical Wavelength (nm)	1540 ~ 1560								
Output Optical Power Stability(dB)	<±0.2								
Polarization Sensitivity dB)	<0.2								
Polarization Mode Dispersion(PS)	<0.5								
Optical Reflect Loss (dB)	>=45								
C/N (dB)	>=50								
CSO (dB)	>=63								
CTB (dB)	>=63								
Optical Fiber Connector	FC/APC or SC/APC								
Noise Figure (dB)	< 5.0 (0dBm optical input)								