

IT8000 (CNR \geq 53.5dB, SBS:13~20 adjustable)

FTTP Multi-port output 1550nm external modulation 47~862MHz



Description

Idealphotonics IT8000 series, Multi-optical port output externally modulated transmitter, a research product which is designed for FTTx PON large area and multi-user access.

IT8000 series, use high-power, low noise, narrow linewidth, continuous broadcast, DFB lasers. It can provide 4~10 way high linearity standard optical power output. It can connect 4~10 units high-power FTTB EDFA (Like Huatai HA5837-32). As this product without EDFA, so each optical port can output up to :CNR \geq 53.5dB、CTB \geq -65dB、CTB \leq -65dB, the high technical index.

IT8000 Series, based on the series of unique and innovative chassis, SBS can reach 13 ~ 20dBm adjustable, suitable for high-power EDFA applications..

IT8000 Series, Consummate RS232 communication interface. use 1+1 powers supply back, up hot-plug function available, avoid power damaged lead system collapse. Machine equipped RS232 communication interface and SNMP network management. Installation of all optical port can be on the front panel, and also can be specified on the rear panel.

Idealphotonics IT8000 series, Multi-optical port output FTTP externally modulated transmitter, Its highindex, high reliability and excellent cost performance, for large and medium cities CATV network, to achieve local large area, multi-user coverage, providing high performance, high-index access.

IT8047 : 4 fiber output, each port \geq 7.0dBm, CNR \geq 53.5dB、SBS: 13~20dBm

continuously adjustable、ITU wavelength adjustable.

IT8067 : 6 fiber output, each port \geq 7.0dBm, CNR \geq 53.5dB、SBS:

13~20dBm

continuously adjustable、ITU wavelength adjustable.

IT8085 : 8 fiber output, each port ≥ 4.5 dBm, CNR ≥ 53.5 dB、SBS:

13~20dBm

continuously adjustable、ITU wavelength adjustable.

IT8105 : 10 fiber output, each port ≥ 4.5 dBm, CNR ≥ 53.5 dB、SBS:

13~20dBm

continuously adjustable、ITU wavelength adjustable.

Feature

Using high-power, continuous wave DFB laser, which provides 4-way, 6 way, 8 way, 10 way high linearity standard optical power output, can be linked more FTTP EDFA.

Innovation SBS: 13 ~ 20dBm adjustable. Telecom class high reliability and network management.

High system indicators: CNR ≥ 53.5 dB、CTB ≥ -65 dB, CTB ≤ -65 dB (Without EDFA).

Externally modulated technical no laser chirp, low dispersion distortion, large extinction ratio, 40 ~ 862MHz band have good features. narrow linewidth (Typ.=0.65MHz), low noise, DFB continuous wavelaser, helps to reduce the dispersion.

ITU standard wavelength, in the ± 200 GHz (± 1.6 nm) range can be adjusted.

AGC / MGC mode is optional at spot; OMI can be optimized at spot.

1+1 powers supply back , up hot-plug function available

Advanced SNMP network management function, perfect RS232 communicate interface..

Casing temperature auto-control.

Application

FTTx PON (FTTH、FTTP)

Large and medium-sized cable television central office front-end local network large area, multi-user access.

DWDM Optical CATV systems value-added services.

Specification

Performance			Index	Supplement
Optic feature	Operating wavelength	(nm)	1540~1563	IT8000-CR
			1528.77~1563.86 (ITU)	IT8000-□□
	Wavelength ADJ. range	(nm)	± 1.6	± 200 GHz

	Wavelength ADJ. mode		±0.05nm stepping		
	Wavelength stability	(Pm/°C)	-1~0		Tc=20~70°C
	Linewidth	(MHz)	Typ.=0.65		FWHM(Δλ), (-3dB full width)
	Side mode suppression ratio	(dB)	≥45		SMSR
	Equivalent noise intensity	(dB/Hz)	≤-160		RIN (20~1000MHz)
	Number of output port		4		IT8047
			6		IT8067
			8		IT8085
			10		IT8105
	Each port output power	(dBm)	≥7.0		IT8047、IT8067
			≥4.5		IT8085、IT8105
	Return loss	(dB)	≥50		
	Optical fiber connector		LC / APC		
RF feature	Work bandwidth	(MHz)	47-862		
	Input level	(dBm V)	18~28		AGC
	Flatness	(dB)	≤±0.75		47~862MHz
	Return loss	(dB)	>16		
	Input impedance	(Ω)	75		
	RF connector		F-Female		
Link feature	Transmit channel		PAL-D / 60CH	PAL-D / 99CH	
	CNR1	(dB)	≥53.5	≥52.0	Back to back

	CNR2	(dB)	≥52.0	≥50.0	65Km optical fiber, receive	0dBm
	CTB	(dB)	≤-65	≤-65		
	CSO	(dB)	≤-65	≤-65		
	SBS restrain	(dBm)	13~20		Adjustable	
General feature	SNMP network management interface		RJ45			
	Communication interface		RS232			
	Power supply	(VAC)	90~265VAC		50 / 60Hz	
		(VDC)	-48		30~72	
	Power Consume	(W)	≤50		Single power works	
	Operating temp.	(°C)	-5~65		Machine temp. control automatically	
	Storage temp.	(°C)	-40~85			
Operating relative humidity	(%)	5~95				
Size (W)x(D)x(H)			19×15.2×1.75 (") 483×386×44 (mm)		S-Type	
			19×17.9×1.75 (") 483×455×44 (mm)		L-Type	

Product series

Model	Number of output port	Output power of each port	Operating wavelength (nm)	SBS Restrain (dBm)	System index (59 routes PAL-D)			
					CNR1	CNR2	CTB	CSO
IT804	4	≥7.0	ITU	13~20	≥53.5	≥52.0	≤-65	≤-

7			wavelength ±200GHz ajdustable	Adjustabl e					65
IT806 7	6	≥7.0			≥53.5	≥52.0	≤-65	≤- 65	
IT808 5	8	≥4.5			≥53.5	≥52.0	≤-65	≤- 65	
IT810 5	10	≥4.5			≥53.5	≥52.0	≤-65	≤- 65	

Test condition: CNR1: Tx to Rx, 0dBm receiving.

CNR2: 16dBm EDFA (NF4.5~5.5dB) , 65km fiber, 0dBm receiving.

Ordering information

Product series		Number of output port		Output power		ITU Grid Ch. No.		Optical port position		Connector		Chassis appearance		Chassis length		Number of power supply		Power supply	
HT8	FTTP (Multi-port output) Analogue external modulation transmitter	04	4 fiber output	5	≥4.5dBm	CR	1547~1563nm	F	Front panel	LA	LC/APC	A	A-Type	S	D:15.2"	P	Dual PS. Hot plug	22	220VAC
		06	6 fiber output	7	≥7.0dBm	23	1558.98nm	B	Back panel			B	B-Type	L	D:17.9"			11	110VAC
		08	8 fiber output			31	1552.52nm					C	C-Type			48	-48VDC		
		10	10 fiber output			37	1547.72nm					O	OEM			42	-48VDC& 220VAC		
						□□	15XX.XXnm												