

HRS-26S/P Series  
950~2600MHz  
Satellite L-Band PIN optical receiver

Technical Specification

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## **1.0 PRODUCT DESCRIPTION**

Huatai HRS-26S/P optical receiver, adopting high-sensitivity PIN detector, receiving sensitivity is -22dBm, typical value: -13dBm. It can receive analogue and digital signal on satellite antenna LNB with the frequency of 950~2600MHz, It can be compatible with any FTTx PON to realize combination of Direct Broadcasting Satellite (DBS)with Internet and FTTH, it can also be used for L-Band uplink/downlink of satellite communication.

HRS-26S/P-113-00: adopting 1U 19” standard casing, the working parameters of the unit are controlled by micro-processor. LCD on the front panel can display the working status and failure and diagnosis. Standard RS232 communication interface, SNMP function. It is suitable for project application.

HRS-26S/P-213-00: Desktop, Minimum exterior structure in the area.

HRS-26S/P-313-00: Wall-mounted.

HRS-26S/P-913-00: Rainproof type, suitable for field installation.

HRS-26S/P-213-WD: Desktop, suitable for FTTx PON. Build-in WD1543, un-seamed connection with ONU in EPON, GPON system.

HRS-26S/P-313-WD: Wall-mounted, suitable for FTTx PON. Build-in WD1543, un-seamed connection with ONU in EPON, GPON system.

## **2.0 PRODUCT FEATURE**

- PIN detector, -22dBm receiving sensitivity, typical value: -13dBm.
- 950~2600Mhz high bandwidth, suitable for SAT-IF application.
- Receiving all L-BAND satellite signal of LNB over single fiber.
- It can be compatible with any FTTx PON technology.
- Different exterior structures. Suitable for FTTH, FTTP, FTTB, FTTC.
- Excellent P/P ratio.

## **3.0 MAIN APPLICATION**

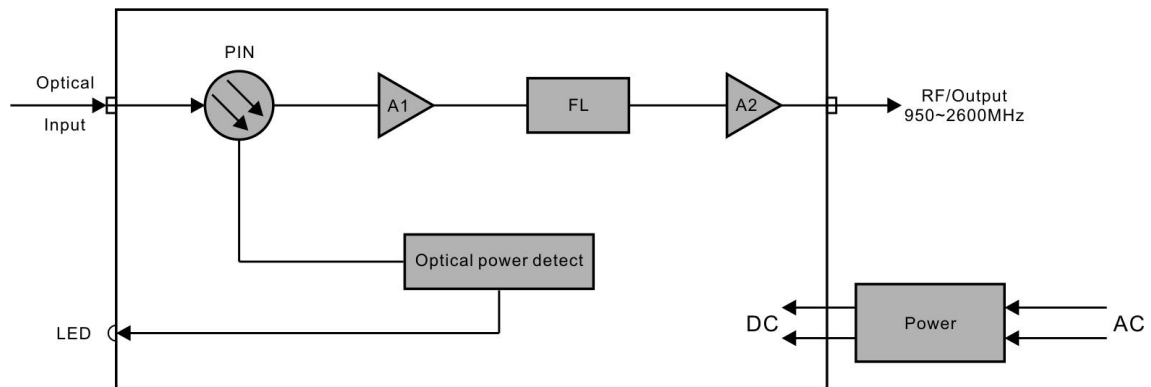
- Satellite L-Band optical fiber building distribution system
- Optical fiber distribution system for ocean going vessels
- Satellite L-Band up / down fiber optic link

## 4.0 Technical index

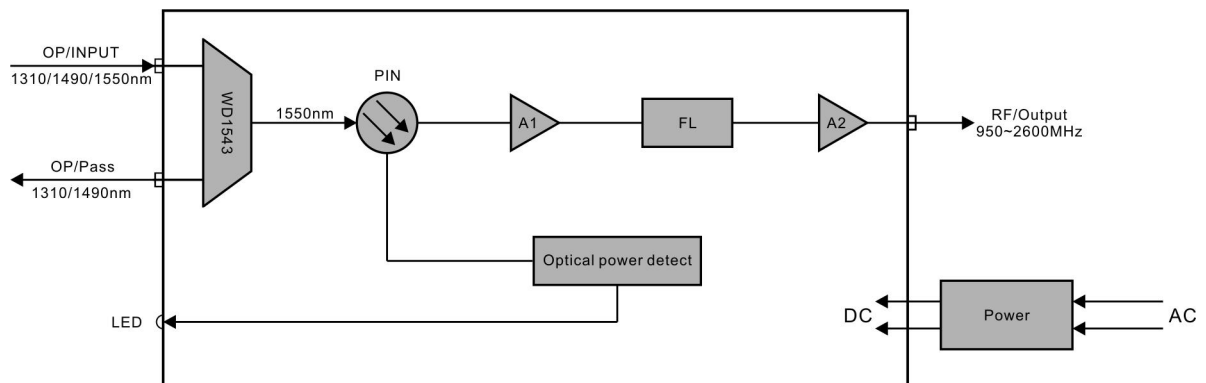
Performance			Index			Supplement	
			Min.	Typ.	Max.		
Optical feature	Operating wavelength	(nm)	1260		1620	HRS-26S/P-×××-00	
			1540		1563	HRS-26S/P-×××-WD	
	Pass wavelength	(nm)		1310/1490		HRS-26S/P-×××-WD	
	Reasonability	R13	(A/W)	0.9			1310nm
		R15		0.95			1550nm
	Receiving optical power	Typical	(dBm)		-13		
		Sensitivity				-22	Pr
		Overload		+3			Po
	Optical receiving PD			PIN			
	Return loss	(dB)	50				
Optical connector			SC/APC or LC/APC				
RF feature	Working bandwidth	(MHz)	950		2600		
	Output level	(dBmV)	10		30		
	Flatness	(dB)	-0.5		+0.5	40MHz	
			-1.0		+1.0	950~2400MHz	
	Output Return loss	(dB)	12			950~2400MHz	
	Channel loading	(CH)			36	QPSK or FM	
	IM3	(dB)	-65				
	HUM	(dB)	-60				
	IP1	(dBm)	18				
	output impedance	( $\Omega$ )		75		Option 50 $\Omega$	
RF connector			F- Female			75 $\Omega$	
			SMA-F			50 $\Omega$	
General feature	SNMP interface			RJ45		HRS-26S/P-113	
	Communication interface			RS232		HRS-26S/P-113	
	Power supply	AC	(V)	90	220	265	
		DC		-30	-48	-72	
	Power consumption	(W)			5	Single PS	
	Operating temp.	( $^{\circ}$ C)	-5		-65		
	Storage temp.	( $^{\circ}$ C)	-40		+85		
	Relative humidity	(%)	5		95		
	Size		( $^{\circ}$ )	19 × 14.5 × 1.75			HRS-26S/P-113
		(mm)	59 × 98 × 23			HRS-26S/P-213	
			117 × 72 × 29			HRS-26S/P-313	
			150 × 135 × 98			HRS-26S/P-913	

## 5.0 Optical receiver electrical schematic diagram

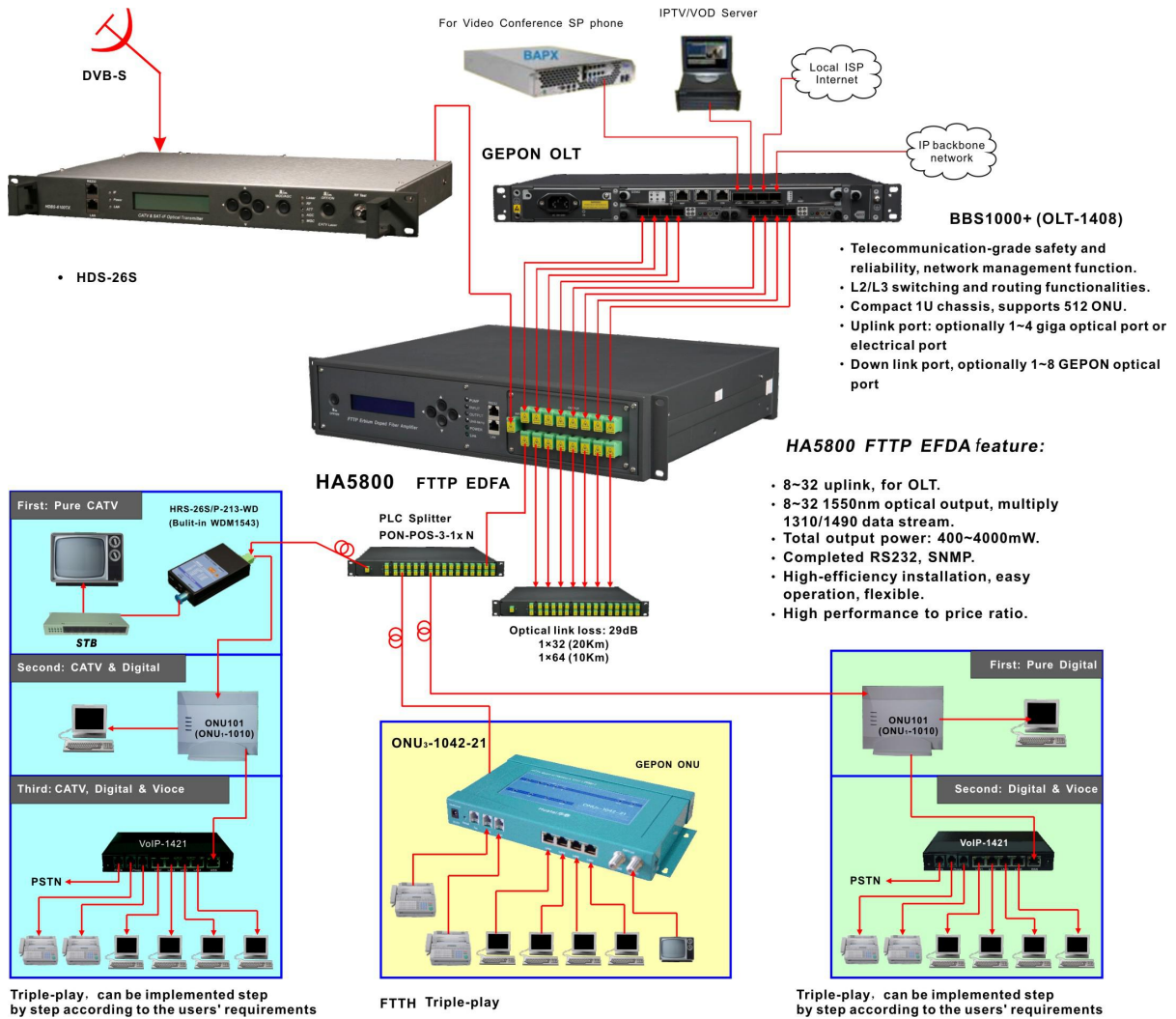
### 5.1 HRS-26S/P-□ 13-00



### 5.2 HRS-26D/P-□ 13-WD



## 6.0 Application of HRS-26S/P in FTTx PON



## 7.0 Product series

Model	Optical receiving diode type	Typical value of receiving power	Exterior structure	CWDM
HRS-26S/P-113-00	PIN	-13dBm	19" 1RU	None
HRS-26S/P-213-00	PIN	-13dBm	Desktop	None
HRS-26S/P-213-WD	PIN	-13dBm	Desktop	Build-in WDM
HRS-26S/P-313-00	PIN	-13dBm	Wall-mounted	None
HRS-26S/P-313-WD	PIN	-13dBm	Wall-mounted	Build-in WDM
HRS-26S/P-913-00	PIN	-13dBm	Field Rainproof	None
HRS-26S/P-713-00	PIN	-13dBm	High-output MGC	None

## 8.0 Ordering information

HRS - 26S / P - 1 3 - 0 0 - 0 / 0 0 - 0 0

Product type		Operating bandwidth		Optical receiving PD type		Product feature		Reception sensitivity		WDM		Optical port position		Connector		Power supply	
HES	Satellite Externally Modulated Optical Transmitter	26A	47~862MHz & 950~2600MHz Analog TV + SAT-IF	P	PIN	1	19" standered type	13	-13dBm	00	Without WDM	F	Front panel	SA	SC/APC	48	-48VDC
				A	APD	2	Small ferrous box, desk-type	24	-24dBm	WD	With WDM	B	Back panel	FA	FC/APC	22	220VAC
HDS	Satellite Direct Modulated Optical Transmitter	26D	47~2600MHz Digital TV + SAT-IF			3	Small aluminum box, wall-mounted type							LA	LC/APC	11	110VAC
HRS	Satellite Optical Receiver	26S	950~2600MHz SAT-IF			9	Aluminum die-casting rainproof type										
						0	OEM										
						7	Distinctive appearance performance										
						8	2U, 3U plug-in										