Category
Reverse Node

RF2F Reverse Node

At the end of almost every feeder line there are potential customers that could be fed with a system extension, but the cost is prohibitive. Utilizing our RF2F reverse node, fiber can be run off of your RF plant to serve customers up to 2 miles economically. The RF2F is available with a single, dual, quad or 8 outputs to easily and inexpensively extend your system. Simply add the RF2F unit in your feeder line, just as you would a regular tap, and then run fiber from the RF2F to your customers home. At the home install a RFoG mini-node and enjoy the added revenue of a happy customer.

Each RF2F can be configured with a single or dual 1550 transmitters, each with a single output or with 2-way or 4-way splits. For example the 8 way RF2F unit includes (2) High power (7dBm) 1550 nm transmitters, (2) 1310 or 1610 receivers, (2) WDM combiners and (2) 4-way fiber splitters giving it a total of 8 outputs. An internal AC power supply is also enclosed in the RF2F's small die cast housing. Dual transmitters and receivers are used to eliminate the requirement to use high power TEC laser diodes, which are costly and require extra circuitry to maintain thermal stability. In addition by using dual receivers, (each one only receiving only 4 inputs), the chance of OBI (Optical Beat Interference) is minimized.

RF2F 17dB EDFA is also available.

Part Number Matrix

RF2F- [x] - [x] - [x] TBBS

M = Mini Housing (RF input Powered)
AC= Wall Wort (AC Adaptor Powered)

15/13 = 1550nm forward transmitter and 1310nm return receiver
15/16 = 1550nm forward transmitter and 1610nm return receiver

Fiber Outputs and FWD Transmitter Output Power (OP)

1/3 = Single fiber output with standard 3dBm transmitter OP
1/7 = Single fiber output with standard 7dBm transmitter OP
2/0 = Dual fiber outputs with 0dBm transmitter OP (each port)
2/3 = Dual fiber output with standard 3dBm transmitter OP (each port)
4/0 = Quad fiber outputs with 0dBm OP (each port)
4/3 = Quad fiber outputs with 3dBm OP (each port)
8/0 = Eight fiber outputs with 0dBm OP (each port)

Category Reverse Nodes

Specifications

Parameter			Value	Option
Optic Specs	Wavelength	(nm)	1548~1563	
	Line width	(MHz)	≤1	FWHM(λ)
	Side mode suppression ratio	(dB)	≥45	SMSR
	Extinction ratio	(dB)	≥20	XP
	Equivalent noise intensity	(dB/Hz)	≤-160	RIN (20~1210MHz)
	Output power	(dBm)	7	Before Optical Splitter
	Return loss	(dB)	≥55	
	Optical fiber connector		SC/APC	
RF Specs	Bandwidth	(MHz)	45-1210	
	Input level	(dBmV)	10	Note: TP is -20 dB down!
	Flatness	(dB)	≤±1.5	
	Return loss	(dB)	>16	
	Noise Figure	(dB)	8	0 pad 0 EQ
	Input impedance	(Ω)	75	RF/INPUT
Link Specs	Transmit channel loading		NTSC/78CH	
	CNR	(dB)	≥50	-1dBm receive
	CNR	(dB)	≥48	-4dBm receive
	CTB	(dBc)	60	
	CSO	(dBc)	60	
	Power supply	(V)	40-90 VAC	
	Power	(W)	≤2	Option 5 mW
	Work temp.	(C)	-40 ~ +65	
	Storage temp.	(V)	-40~ 85	
	Operating relative humidity	(%)	5~95	
	Size	(")	7.5×10×4	(W)x(D)x(H)

OPTIONS:

- 1310nm or 1610nm return
- Single, Dual or Quad Internal Optical Splitters