

# FR200-4

## Quad return path optical receiver



The FR200-4 Quad HFC return path receiver can convert upstream optical signals to RF in the Cable TV headend or remote hub. Four independent optical receivers are integrated into a 1RU 19" case. Each optical receiver features a low noise design, with  $-22\text{dBm}$  receive sensitivity to provide service on even the longest fiber runs. The receivers are temperature hardened and can be operated even in non-air conditioned environments. Typical powering is from 120 VAC, but a UL-Listed version is readily available using a 12 VDC external switching supply.



### Features:

- 4 low noise optical receivers, up to  $-22\text{dBm}$  receive sensitivity.
- 1200~1620nm band wavelength
- Optional SNMP network management function option
- Temperature hardened, allowing  $-40\sim+65^{\circ}\text{C}$  operating temperature
- Simple mode fiber, 19" 1RU mount, high-density quad optical receiver
- Available with UL-Listed external switching power supply

## TECHNICAL SPECIFICATIONS

Performance			Index			Supplement	
			Min.	Typ.	Max.		
Optical feature	Operating wavelength ( $\lambda$ )	(nm)	1200		1620		
	Responsivity	R13	(A/W)	0.85	0.95		1310nm
		R15		0.85	1.0		1550nm
		R16			0.85		1610nm
	Optical link budget loss		(dB)	17			
	Receiving power	Typical	(dBm)	-17		-7	
		Sensitivity			-23	-22	Pr
		Overload		0	+1		Po
	Number of optical receiver		(pcs)	4			
	Return loss		(dB)	50			
Optical connector			SC/APC			LC/APC optional	
RF feature	Operating bandwidth		(MHz)	5		200	
	RF output level		(dBmV)	30		60	
	RF gain adjustable		(dB)	-30		0	
	Flatness		(dB)	-0.75		+0.75	
	Return loss		(dB)	16			
	RF test point/monitor		(dB)	-20.5	-20	-19.5	
	Noise power ratio (NPR)		(dB)	37			F-P, Link loss>15dB
41						DFB, Link loss>15dB	
General feature	Power supply	AC	(V)	90	120	265	
		DC		11	12	13	
	Power consumption		(W)			48	
	Operating temperature		( $^{\circ}$ C)	-40		+65	
	Relative humidity		(%)	5		95	
	Size		(")	19 $\times$ 12 $\times$ 1.75			(W) $\times$ (D) $\times$ (H)

