



Applications

- CATV
- Broadband

Features

- Wide Bandwidth of 40 to 860 MHz Accommodates Up to 79 Channels on All Models
- Provides Excellent Picture Quality with a CNR up to 54.5 dB, CSO of -63 dBc, and CTB of -66 dBc
- RF Output Up to +28 dBmV Allows a Greater Number of Drops or Splits
- Wide Optical Input Range of -8 dBm to +4.5 dBm Permits the Use of a Lower Power Transmitter, Reducing System Cost
- Built-in, Universal AC Power Supply Frees System User from Bulky Wall-Mount AC Adapters

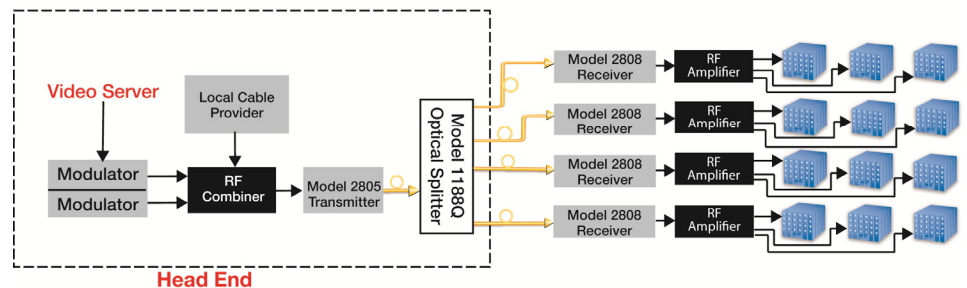
The 2808 79 Channel VSB/AM Optical Receiver provides CATV distribution headend operators with an extensive array of features that offer a low-cost solution to increase system performance. The receiver provides an RF output of +28 dBmV allowing multiple RF splits without the use of an external RF amplifier. The 2808 is equipped with a manual gain control that allows the user to adjust the RF output level for optimum performance. Additionally, the receiver's ability to operate over a wide optical input range of -8 to +4.5 dBm allows for a variety of system designs without degrading performance. The 2808 can transport up to 79 CATV channels using the entire high-frequency bandwidth, or alternatively, it can transport up to 79 channels of standard analog CATV signals while utilizing the remaining high-frequency bandwidth to transport 30 digital QAM channels. The receiver includes a universal AC power supply, freeing the user from a bulky wall-mount AC adapter. The streamline design of the 2808 offers the flexibility and performance demanded by today's broadband professional.

RF & Optical Characteristics

Parameter	Min	Typ	Max	Units
Optical Input Power	-8.0	0.0	+4.5	dBm
Operating Wavelength	1290	1310	1330	nm
Operating Wavelength	1530	1550	1571	nm
Bandwidth	40	-	860	MHz
Output RF Impedance	-	75	-	Ohms
RF Output Level	-	-	+28	dBmV
RF Output Return Loss	-	16	-	dB
Back Reflection Tolerance	-	-	-50	dB
Required Fiber Bandwidth	2,000	-	-	MHz
Composite Second Order (CSO)	-	-63	-	dBc
Composite Triple Beat (CTB)	-	-66	-	dBc
Carrier-to-Noise Ratio	-	58	-	dB

System performance specifications indicated for use with 9/125 μ m singlemode fiber.

Network Diagram



Electrical Characteristics

Parameter	Min	Typ	Max	Units
Power Supply Voltage	-	120	240	V _{AC}
Power Supply Frequency	50	60	-	Hz
Power Dissipation	-	8	-	Watts

Physical Characteristics

Parameter	Min	Typ	Max	Units
Weight	-	1.1 0.5	-	lbs kg
Dimensions	-	8.45 x 2.95 x 1.12 215 x 75 x 29	-	in mm

Environmental Characteristics

Parameter	Min	Typ	Max	Units
Operating Temperature Range	0	-	+50	°C
Storage Temperature Range	-20	-	+70	°C
Humidity (RH, non-condensing)	5	-	95	%

79 Channel CATV Receiver Part Numbers

Part Number	Description
2808R-SFSP	Fiber Optic Receiver, 1310/1550 nm, SC/APC Optical Connector
2808R-SFAP	Fiber Optic Receiver, 1310/1550 nm, FC/APC Optical Connector