2804 110 Channel CATV Professional Distribution System (PDS)

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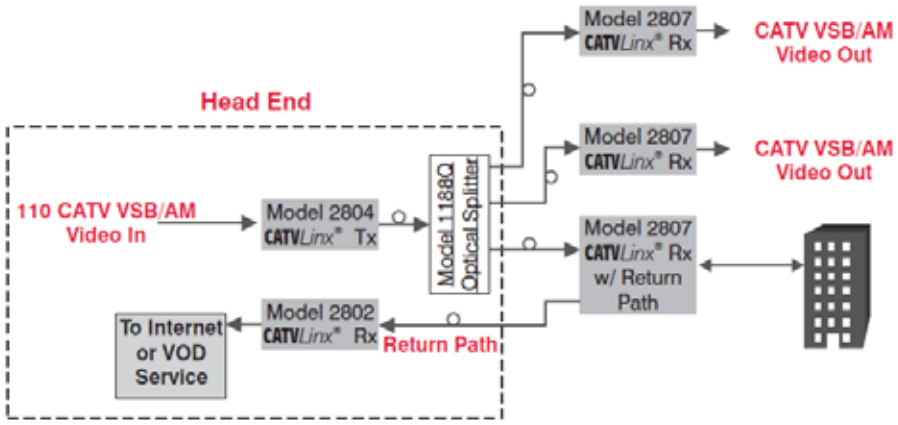
Features

- Transmits Up to 110 Channels Over One Singlemode Fiber at 1310 nm
- VSB/AM Transmission Ensures Compatibility with Standard CATV Modulators, Processors, etc
- Transmitter Includes a 7-Segment Display and Other Indicator LED's that Allow Critical System Parameters to be Accurately Monitored
- Intergral -20 dB RF Test Port Simplifies Installation, Commissioning, and Troubleshooting
- Key Lock Power Switch Prevents Accidental Power-Down
- Multiple Laser Output Power Options Provide Complete System Design Flexibility
- Excellent for Medium to Large Campus Video Distribrution Systems
- +13 dBm Optical Output Power Supports Links beyond 20 km

The 2804 110 Channel CATV PDS transmitter is part of a robust system for transporting up to 110 Channels of VSB/AM modulated signals over a singlemode optical fiber. The system is also suitable for transporting 80 CATV channels along with 30 digital QAM channels in the upper frequency range. The 2804 provides 40-870 MHz of usable bandwidth for video signals stacked at 6 MHz intervals. A low loss singlemode fiber allows full channel loading to beyond 20 km while maintaining a good carrier-to-noise ratio. A key power lock ensures the transmitter cannot be accidentally turned off and a blue 7-segment display allows the user to monitor a number of system parameters. A -20 dB RF test port on the front panel provides a convenient means for installing, commissioning, and troubleshooting the transmitter. The 2804 may be used with the 2807 mini-node receiver for use in return path and multiple splitter applications or with the 2808 receiver for basic 110 channel CATV transmission. In all cases, the link provides excellent performance for many demanding applications such as broadband LANs, distance learning, and multiple data services.

110 Channel Transmitter Part Numbers

Description	Part Number (SC/APC Optical Connector)	Part Number (FC/APC Optical Connector)
1RU Transmitter, +6 dBm Optical Output Power	2804TH-SCSP/06 2804TH	-SCAP/06
1RU Transmitter, +8 dBm Optical Output Power	2804TH-SCSP/08	2804TH-SCAP/08
1RU Transmitter, +10 dBm Optical Output Power	2804TJ-SCSP/10	2804TJ-SCAP/10
1RU Transmitter, +12 dBm Optical Output Power	2804TK-SCSP/12	2804TK-SCAP/12
1RU Transmitter, +13 dBm Optical Output Power	2804TL-SCSP/13 2804TL	-SCAP/13



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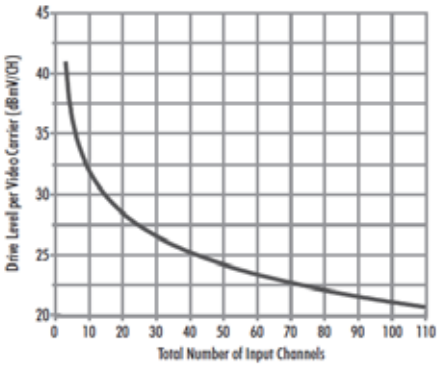
RF & Optical Characteristics

Parameter	Min	Typ	Max	Units
Channel Loading	-	-	110	ch
Operating Wavelength	1290	1310	1330	nm
Bandwidth	40	-	870	MHz
Input/Output RF Impedance	-	75	-	Ohms
Side Mode Suppression Ratio	30	-	-	dB
Back Reflection Tolerance	-	-	-50	dB
Required Fiber Bandwidth	2,000	-	-	MHz
Composite Second Order (CSO)	-	-	-65	dBc
Composite Triple Beat (CTB)	-	-	-69	dBc
Carrier-to-Noise Ratio		See Graph		dB

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

Carrier-to-Noise Performance



Electrical Characteristics

Parameter	Min	Typ	Max	Units
Power Supply Voltage		120	240	V_{AC}
Power Supply Frequency	50	60	-	Hz
Power Dissipation	-	25	-	Watts
Fuse Rating (Slow Blow)		1.25		A

Physical Characteristics

Parameter	Min	Typ	Max	Units
Weight	-	5.5 2.5	-	lbs. kg
Dimensions	-	19 x 1.72 x 14.1 483 x 44 x 358	-	in. mm

Environmental Characteristics

Parameter	Min	Typ	Max	Units
Operating Temperature Range	0	-	+45	^{O}C
Storage Temperature Range	-20	-	+70	^{O}C
Relative Humidity	0	-	90	%

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