2802 PRO 10 Channel Singlemode CATV VSB/AM Video Link

DATASHEET | JULY 2014 FIBER OPTICS



Applications

- Small Corporate TV Video Distribution
- Campus Media Retrieval Systems
- Tele-Conferencing

Features

- Able to Transmit Up to 10 CATV Channels Over One Singlemode Fiber
- Supports Transmission of Sub-Band, Low-Band, FM, Mid-Band, and High-Band Channels, Adding Flexibility to the System
- Built in RF Input Level Indicator Aids in Commissioning and Troubleshooting the Link
- Ideal for Use as CATV Return Path Link
- Compatible with Standard Television Industry Voltages and Impedances

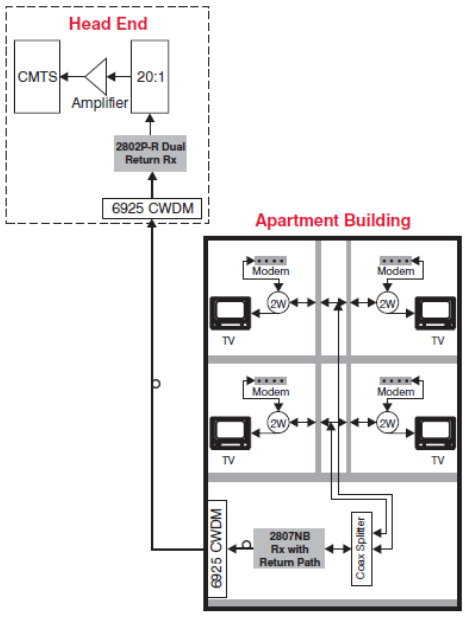
The 2802 PRO 10 Channel CATV VSB/AM Video Link offers a state-of-the-art solution for high-quality CATV transmission. The 2802 PRO offers exceptional analog bandwidth from 5 to 400 MHz allowing transmission of all sub-band, low-band, FM, mid-band, and high-band channels. This feature allows the system to deliver custom designed video services. In conjunction with a VCR, camcorder, or CATV feed, the 2802 PRO can transmit TV channels and their sound carriers, over a distance of 10 km or more at 1310 nm over one singlemode fiber. The link is ideal for implementing a CATV return path link. The link utilizes inputs from standard CATV VSB/AM modulators, processors, and other ancillary equipment, making the 2802 PRO link an excellent plug-and-play system. LED indicators and built-in RF and optical power meters allow for quick assessment of the link's status.

RF & Optical Characteristics

Parameter	Min	Typ	Max	Units
Transmitter Optical Output Power	+2.0	+3.0	+4.0	dBm
Receiver Optical Input Power	-9.0	-	+4.0	dBm
Optical Loss Range	0	-	12	dB
Operating Wavelength	1290	1310	1330	nm
Lower Bandwidth	-	-	5	MHz
Upper Bandwidth	350	400	-	MHz
RF Impedance	-	75	-	Ohms
0 dB Optical Loss	-	+24	-	dB
10 dB Optical Loss	-	+4	-	dB
Composite Triple Beat (CTB)	-	-63	-57	dBc
Composite Second Order (CSO)	-	-70	-65	dBc
Carrier-to-Noise Ratio		53.5		dB

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

Network Diagram



Information contained herein is deemed reliable and accurate as of the issue date. EMCORE reserves the right to change the design or specification at any time without notice.

2802 PRO 10 Channel Singlemode CATV VSB/AM Video Link

Electrical Characteristics

Parameter	Min	Typ	Max	Units
Power Supply Voltage		+9		VDC
Transmitter Power Supply Current	-	205	260	mA
Receiver Power Supply Current	-	95	150	mA

Physical Characteristics

Parameter	Min	Typ	Max	Units
Weight (Stand-Alone Tx/Rx)	-	6 170	-	oz. g
Dimensions (Stand-Alone Tx/Rx)	-	5.75 x 2.95 x 1.143 146 x 75 x 29	-	in mm

Environmental Characteristics

Parameter	Min	Typ	Max	Units
Operating Temperature Range	+10	-	+40	^{O}C
Storage Temperature Range	-20	-	+70	^{O}C
Relative Humidity	0	-	95	%

10 Channel Singlemode Transmitter and Receiver Part Numbers

Part Number	Description
2802P-T-1310-FA	Stand-Alone Transmitter, 1310 nm, FC/APC Optical Connector
2802P-T-1310-SA	Stand-Alone Transmitter, 1310 nm, SC/APC Optical Connector
2802P-R-FA	Stand-Alone Receiver, 1310/1500 nm FC/APC Optical Connector
2802P-R-SA	Stand-Alone Receiver, 1310/1550 nm SC/APC Optical Connector

Note: Power Supply Part Number PS095 included

Accessory Part Numbers

Part Number	Description
PS095	Transmitter Stand-Alone Power Supply, +9 Volts DC
PS095	Receiver Stand-Alone Power Supply, +9 Volts DC

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