

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
- Ideal for Use as CATV Return Path Link
- Compatible with Standard Television Industry Voltages and Impedances

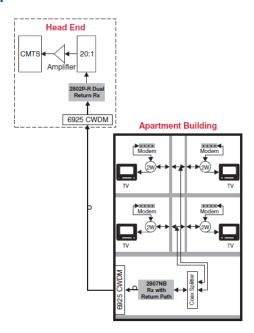
The 2802 PRO 10 Channel CATV VSB/AM Video Link offers a state-of-the-art solution for high-quality CATV transmission. The 2802 PRO offers exceptional analog bandwidth from 5 to 400 MHz allowing transmission of all sub-band, low-band, FM, mid-band, and highband channels. This feature allows the system 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	Тур	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



2802 PRO 10 Channel Singlemode CATV VSB/AM Video Link



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Electrical Characteristics

Parameter	Min	Тур	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	Тур	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	Тур	Max	Units
Operating Temperature Range	+10	-	+40	οС
Storage Temperature Range	-20	-	+70	°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