advanced media technologies®

MODEL

2807

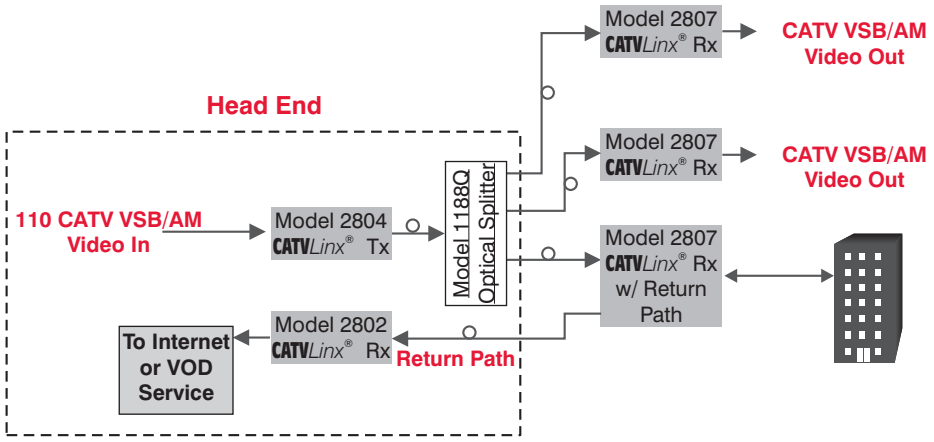
CATV RECEIVER

emcore
empower with light™

- Wide bandwidth of 50 to 860 MHz accommodates up to 110 channels on all models.
- Provides excellent picture quality with a CNR up to 54.5 dB, CSO of -63, and CTB of -66 dBm.
- Provides up to +38 dBmV RF output signal over the entire optical input range, allowing 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, lowering system cost.
- Capable of responding to changing system requirements with field-installable return path modules.
- Digitally adjustable built-in RF attenuator and equalizer settings allow for accurate adjustment of parameters via an LCD screen.

Model 2807 Receiver

The Force CATV*Linx*® Model 2807 Mini-node Optical Receiver, working with either the Model 2804 PDS or 2805 PNS transmitter, provides CATV distribution headend operators with an extensive array of features that offer a low-cost solution to increase system performance. The unit provides an output of +38 dBmV of RF over the entire optical input range, allowing multiple RF splits without the use of an external RF amplifier. Additionally, the mini-node'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. An LCD display allows the operator to accurately set the tilt and RF output levels to ensure quality of service. The Model 2807 mini-node can be ordered either with or without the return path module. A separate return path module may also be ordered, allowing for a quick factory upgrade or laser replacement. The return path module utilizes either an FP or DFB laser. The modular design of the Model 2807 offers the flexibility and performance demanded by today's broadband professional.



Specifications and Ordering Information

Optical Characteristics*

	Min	Typ	Max	Units
CATV Receiver				
Operating Wavelength	1290	1310	1330	nm
Operating Wavelength	1490	1550	1610	nm
Optical Input Power	-8.0		+4.5	dBm
Channel Loading			110	Ch.
Bandwidth	50		860	MHz
RF Output Level		+38		dBmV
Output Return Loss		16		dB
Required Fiber Bandwidth	2,000			MHz
Output Impedance		75		Ohms
Backreflection Tolerance			-50	dB
Composite Second Order (CSO)		-63		dBc
Composite Triple Beat (CTB)		-66		dBc
Return Path Modules				
Operating Wavelength	1290	1310	1330	nm
Operating Wavelength	1490	1550	1610	nm
Optical Output (FP Laser)		1.5		mW
Optical Output (DFB Laser)		3.0		mW
Bandwidth	5		42	MHz

Electrical Characteristics*

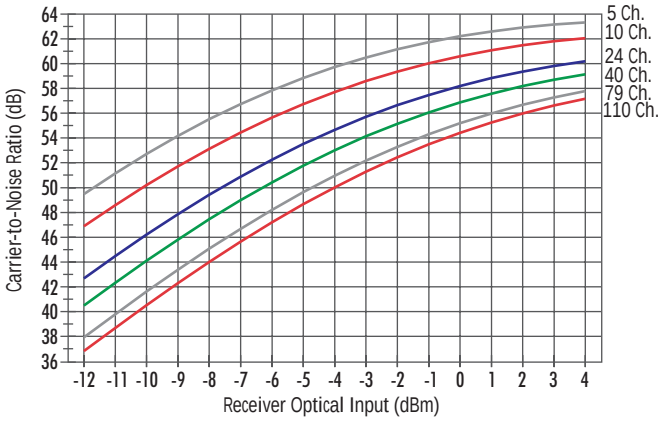
	Min	Typ	Max	Units
Power Supply Voltage	+10	+12	+15	VDC
Power Dissipation		10		Watts

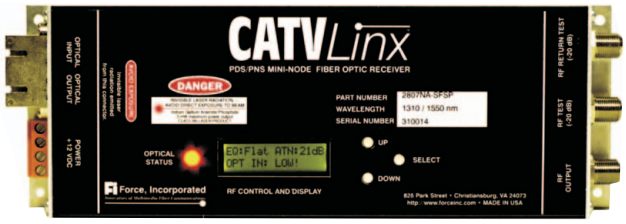
Physical Characteristics*

	Min	Typ	Max	Units
Weight		10		oz.
		283.5		g
Dimensions		8.45 x 2.95 x 1.75		in.
		215 x 75 x 45		mm

Environmental Characteristics*

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





Model 2807 Receiver

SM 77/110 Channel Rx P/N*

Rx and Return Path Module Options	No Return Path	1.5 mW FP Laser, 1310 nm	3.0 mW DFB Laser, 1310 nm	3.0 mW DFB Laser, 1550 nm	3.0 mW DFB Laser, CWDM
Mini-node Rx, SM, 1310/1550 nm, SC/APC	2807NA-SFSP	2807NB-SFSP	2807NC-SFSP	2807ND-SFSP	2807NE-SFSP
Return Path Module, SM SC/APC		2807PB-SCNN	2807PC-SDNN	2807PD-SDNN	2807PE-SDNN

*System performance specifications indicated for use with 9/125 μm single-mode fiber. Force recommends the Model PS200 +15 Volts DC, 950 mA power supply for use with this product. Please contact the factory for FC/APC connector options and complete performance specifications and part numbers. The receiver Model 2807 works with transmitter Models 2804 and 2805; please see IOM2804 and IOM2805 for product and ordering information.

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