

DATASHEET | JULY 2014

FIBER OPTICS



Applications

- CATV
- **Broadband LANs**
- Distance Learning
- Multiple Data Services

Features

- Transmits Up to 79 Channels Over One Singlemode Fiber
- VSB/AM Transmission Ensures Compatibility with Standard CATV Modulators, Processors, etc
- Designed for Distances up to 10 km. Offers an Optical Output Power of +4.5
- Convenient Compact (3" x 8.5") Enclosure is One of the Smallest in the **CATV Industry**
- Built-In, Universal AC Power Supply Frees System User from Bulky Wall-Mount AC Adapters
- Excellent for Low Budget Structured In-**Building Premise Wiring Video Applications**

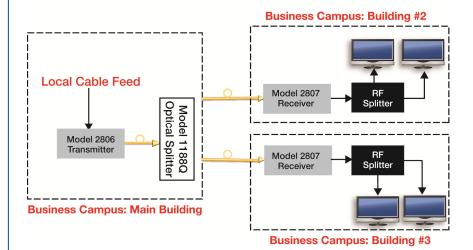
The 2806 79 Channel CATV LDS transmitter is part of a low cost system for transporting up to 79 channels of VSB/AM modulated signals over a singlemode optical fiber. The system provides 40-870 MHz of usable bandwidth for video signals stacked at 6 MHz intervals. A low loss singlemode fiber allows full channel loading to beyond 10 km while maintaining a good carrier-to-noise ratio. Because of its relatively small size, the 2806 can be mounted almost anywhere and it is a true plug-and-play system when used with 2808 or 2809 receivers. Together, this link provides excellent performance for many demanding applications such as broadband LANs, distance learning, and multiple data services.

RF & Optical Characteristics

Parameter	Min	Тур	Max	Units
Channel Loading	-	-	79	ch
Operating Wavelength	1290	1310	1330	nm
Optical Output Power	-	+4.5	-	dBm
Bandwidth	40	-	870	MHz
Input/Output RF Impedance	-	75	-	Ohms
Side Mode Suppression Ratio	30	40	-	dB
Backreflection Tolerance	-	-	-50	dB
Required Fiber Bandwidth	2,000	-	-	MHz
Composite Second Order (CSO)	-	-57	-	dBc
Composite Triple Beat (CTB)	-	-65	-	dBc
Carrier-to-Noise Ratio		56		dB

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

Network Diagram



2806 79 Channel CATV **Limited Distance Solution (LDS)**



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Electrical Characteristics

Parameter	Min	Тур	Max	Units
Power Supply Voltage	-	120	240	V_{AC}
Power Supply Frequency	50	60	-	Hz
Power Supply Current	-	75	-	mA

Physical Characteristics

Parameter	Min	Тур	Max	Units
Weight	-	1.0 0.45	-	lb kg
Dimensions	-	8.45 x 2.95 x 1.12 215 x 75 x 29	-	in mm

Environmental Characteristics

Parameter	Min	Тур	Max	Units
Operating Temperature Range	0	-	+45	°С
Storage Temperature Range	-20	-	+70	°С
Relative Humidity	0	-	90	%

79 Channel Transmitter Part Numbers

Part Number	Description
2806T-SCSP	Flange Mount Transmitter, +4.5 dBm Optical Output Power, SC/APC Optical Connector
2806T-SCAP	Flange Mount Transmitter, +4.5 dBm Optical Output Power, FC/APC Optical Connector