

2806 77 Channel CATV Limited Distance Solution (LDS)



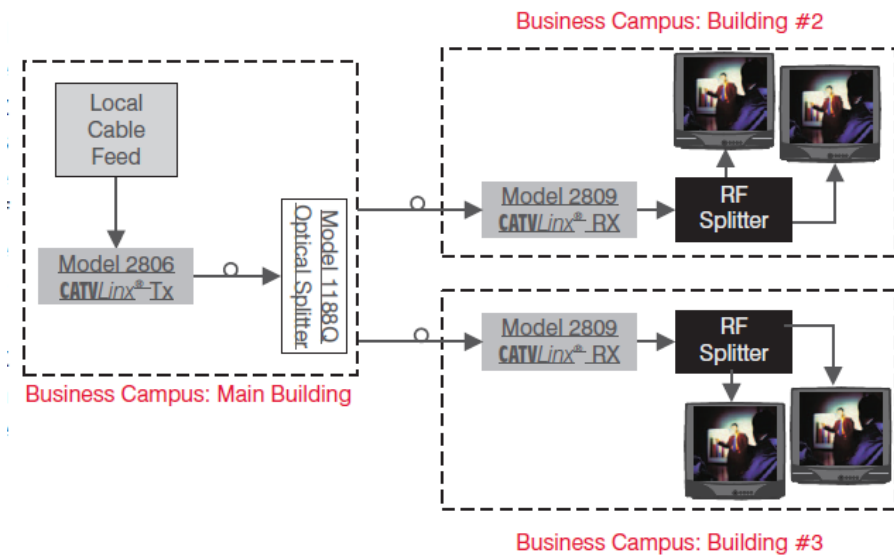
Features

- Transmits Up to 77 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 dBm
- 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 77 Channel CATV LDS transmitter is part of a low cost system for transporting up to 77 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.

77 Channel Transmitter Part Numbers

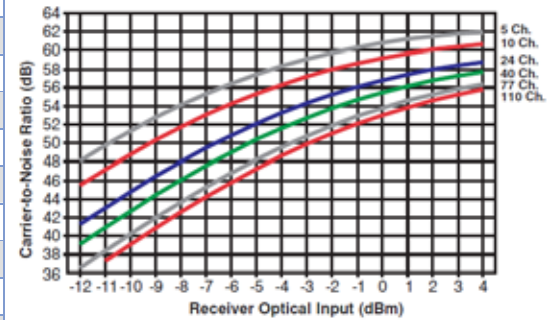
| Description | Part Number |
|---|-------------|
| Flange Mount Transmitter, +4.5 dBm Optical Output Power, SC/APC Optical Connector | 2806T-SCSP |
| Flange Mount Transmitter, +4.5 dBm Optical Output Power, FC/APC Optical Connector | 2806T-SCAP |



RF & Optical Characteristics

| Parameter | Min | Typ | Max | Units |
|------------------------------|-------|-----------|------|-------|
| Channel Loading | - | - | 77 | 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 | | See Graph | | dB |

Carrier-to-Noise Performance



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

Electrical Characteristics

| Parameter | Min | Typ | Max | Units |
|------------------------|-----|-----|-----|-----------------|
| Power Supply Voltage | - | 120 | 240 | V _{AC} |
| Power Supply Frequency | 50 | 60 | - | Hz |
| Power Supply Current | - | 75 | - | mA |

Physical Characteristics

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

Environmental Characteristics

| Parameter | Min | Typ | Max | Units |
|-----------------------------|-----|-----|-----|-------|
| Operating Temperature Range | 0 | - | +45 | °C |
| Storage Temperature Range | -20 | - | +70 | °C |
| Relative Humidity | 0 | - | 90 | % |