

## empower with light<sup>™</sup> 2808 110 Channel CATV Optical Receiver



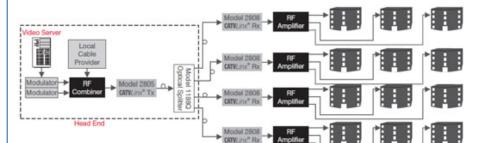
#### **Features**

- Wide Bandwidth of 40 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 dBc, and CTB of -66 dBc
- RF Output Up to +28 dBmV Allows 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, Reducing System Cost
- Built-in, Universal AC Power Supply Frees System User from Bulky Wall-Mount AC Adapters

The 2808 110 Channel VSB/AM Optical Receiver provides CATV distribution headend operators with an extensive array of features that offer a low-cost solution to increase system performance. The receiver provides an RF output of +28 dBmV allowing multiple RF splits without the use of an external RF amplifier. The 2808 is equipped with a manual gain control that allows the user to adjust the RF output level for optimum performance. Additionally, the receiver'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. The 2808 can transport up to 110 CATV channels using the entire high-frequency bandwidth, or alternatively, it can transport up to 80 channels of standard analog CATV signals while utilizing the remaining high-frequency bandwidth to transport 30 digital QAM channels. The receiver includes a universal AC power supply, freeing the user from a bulky wall-mount AC adapter. The streamline design of the 2808 offers the flexibility and performance demanded by today's broadband professional.

#### 77/110 Channel CATV Receiver Part Numbers

| Description  | Part Number |
|--|-------------|
| Fiber Optic Receiver, 1310/1550 nm, SC/APC Optical Connector | 2808R-SFSP  |
| Fiber Optic Receiver, 1310/1550 nm, FC/APC Optical Connector | 2808R-SFAP  |





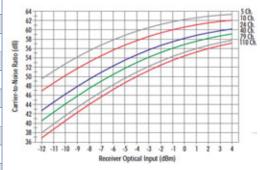
Semcore empower with light™ 2808

# **110 Channel CATV Optical Receiver**

### **RF & Optical Characteristics**

| Parameter                    | Min   | Тур       | Max  | Units |
|------------------------------|-------|-----------|------|-------|
| Optical Input Power          | -8.0  | 0.0       | +4.5 | dBm   |
| Operating Wavelength         | 1290  | 1310      | 1330 | nm    |
| Operating Wavelength         | 1530  | 1550      | 1571 | nm    |
| Bandwidth                    | 40    | -         | 860  | MHz   |
| Output RF Impedance          | -     | 75        | -    | Ohms  |
| RF Output Level              | -     | -         | +28  | dBmV  |
| RF Output Return Loss        | -     | 16        | -    | dB    |
| Back Reflection Tolerance    | -     | -         | -50  | dB    |
| Required Fiber Bandwidth     | 2,000 | -         | -    | MHz   |
| Composite Second Order (CSO) | -     | -63       | -    | dBc   |
| Composite Triple Beat (CTB)  | -     | -66       | -    | dBc   |
| Carrier-to-Noise Ratio       |       | See Graph |      | dB    |

Carrier-to-Noise Performance



System performance specifications indicated for use with 9/125  $\mu$ m singlemode fiber.

### **Electrical Characteristics**

| Parameter              | Min | Тур | Max | Units           |
|------------------------|-----|-----|-----|-----------------|
| Power Supply Voltage   | -   | 120 | 240 | V <sub>AC</sub> |
| Power Supply Frequency | 50  | 60  | -   | Hz              |
| Power Dissipation      | -   | 8   | -   | Watts           |

### **Physical Characteristics**

| Parameter  | Min | Тур                                 | Max | Units     |
|------------|-----|-------------------------------------|-----|-----------|
| Weight     | -   | 1.1<br>0.5                          | -   | lbs<br>kg |
| Dimensions | -   | 8.45 x 2.95 x 1.12<br>215 x 75 x 29 | -   | in<br>mm  |

## **Environmental Characteristics**

| Parameter                     | Min | Тур | Мах | Units |
|-------------------------------|-----|-----|-----|-------|
| Operating Temperature Range   | 0   | -   | +50 | °C    |
| Storage Temperature Range     | -20 | -   | +70 | °C    |
| Humidity (RH, non-condensing) | 5   | -   | 95  | %     |

Specifications Subject To Change Without Notice

Rev 01-14

© Toner Cable Equipment, Inc.