

SR812S Optical Receiver

1. Product Overview

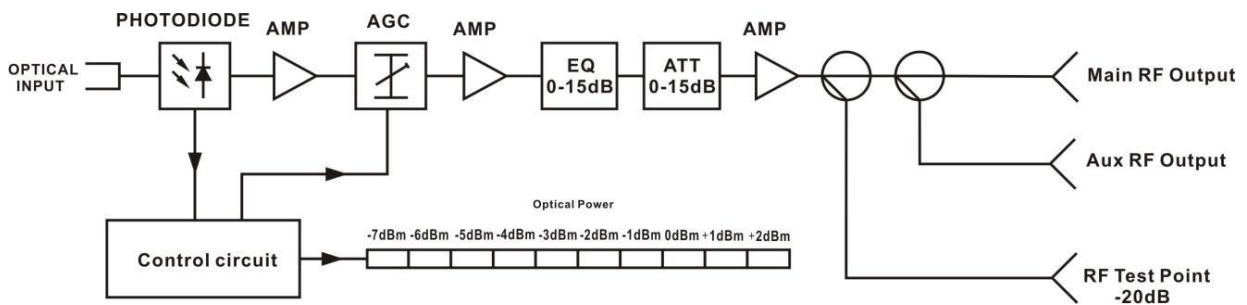
SR812S are our universal CATV network optical receiver with network management transponder. The pre-amp adopts all-GaAs MMIC amplify and the post-amp adopts GaAs power double amplify module. Optimized circuit design, coupled with our years professional RF design experience, the equipment achieve high performance index. It is an ideal model for CATV network.



2. Features

- High response PIN photoelectric conversion tube, 1G bandwidth design.
- Attenuation and equalization can be continuously adjustable knob type or insert type.(Optional)
- Power doubler output, high gain and low distortion.
- Optical AGC control, when the input optical power range is $-7 \sim +2$ dBm, the output level basically unchanged.
- Optional network transponder, support NMS network management system.

3. Block Diagram

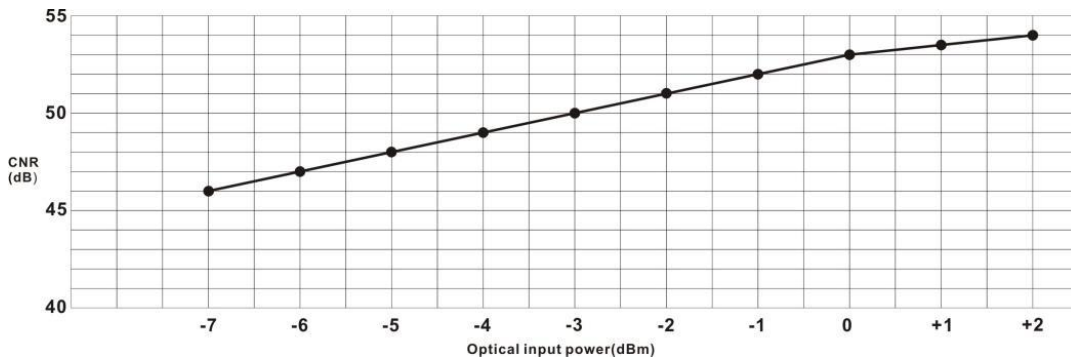


4 Technique Parameter

| Item | Unit | I Type | II Type | III Type | IV Type |
|------------------------------|------|---|---------|-------------------|---------|
| Optical Parameters | | | | | |
| Optical AGC range | dBm | -7 ~ +2 | | | |
| Optical Return Loss | dB | >45 | | | |
| Optical Receiving Wavelength | nm | 1100 ~ 1600 | | | |
| Optical Connector Type | | FC/APC、 SC/APC or specified by the user | | | |
| Fiber Type | | Single Mode | | | |
| RF Parameters | | | | | |
| Frequency Range | MHz | 45~862/1003 | | | |
| Flatness in Band | dB | ±0.75 | | | |
| Output Return Loss | dB | ≥14 | | | |
| Rated Output Level | dBμV | ≥102 | ≥102 | ≥104 | ≥108 |
| Max Output Level | dBμV | ≥102 | ≥102 | ≥104 | ≥118 |
| EQ | dB | 0 ~ 15 adjustable | | Fixed EQ inserter | |

| | | | |
|-------------------------------|----|------------------------------|---|
| ATT | dB | 0 ~ 15 adjustable | Fixed ATT inserter 84 channel PAL-D analog signal -2dBm receiving optical power rated output level, 8dB equalization |
| C/N | dB | ≥ 51 | |
| C/CTB | dB | ≥ 65 | |
| C/CSO | dB | ≥ 60 | |
| Generic characteristic | | | |
| Power voltage | V | AC (110~240) V or AC(35~90)V | |
| Output impedance | Ω | 75 | |
| Operating temperature | ℃ | -40~60 | |
| Power consumption | VA | ≤ 15 | |
| Dimension | mm | 185 (L) × 140 (W) × 91 (H) | |

5. Relation Table of Input Optical Power and CNR



6. Structure Diagram



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|--|
| 1. Optical Fiber Input |
| 2. Optical Fiber Flange |
| 3. Adjustable EQ |
| 4. Adjustable ATT |
| 5. -20dB RF Test Port |
| 6. Output Tap or Splitter |
| 7. RF Output 1 |
| 8. RF Output 2 |
| 9. Power-pass Inserter 1 |
| 10. Power-pass Inserter 2 |
| 11. Main Board Power Interface |
| 12. Power Indicator |
| 13. Optical power indicator |
| 14. AC60V and AC220V conversion inserter |
| 15. AC60V power input |
| 16. Data interface |