



## V8801C-1

Optical Receiver

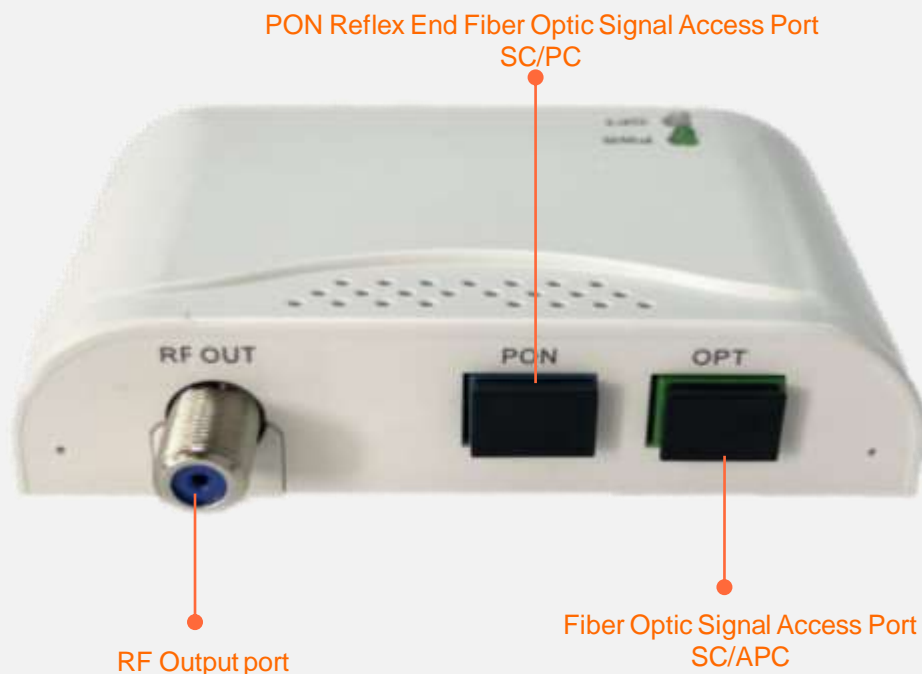
### Highlights :

- 47MHz to 1003MHz frequency bandwidth, built-in WDM
- Built-in optical AGC control circuit to ensure stable output level
- Adopt high efficiency switching power adapter, wide voltage adaption range
- Ultra-low current, ultra-low power consumption
- Compatible with EPON, GPON, and 10G PON optical signals

### Introduction:

The VSOL V8801C-1 optical receiver is a compact optical unit with built-in WDM, designed for HFC broadband transmission networks. The device reflects PON optical signals through advanced photoelectric conversion technology and features AGC (Automatic Gain Control) to ensure that it always provides high-quality, low-noise signal transmission at different signal strengths. Its excellent frequency response and low distortion characteristics make it ideal for homes and small businesses to enjoy a stable, high-speed network experience.

### Interface Description :



| No. | Item                              | Technical Parameters   | note              |
|-----|-----------------------------------|--|-------------------|
| 1   | CATV Receiving Optical Wavelength | 1550±10nm  |                   |
| 2   | PON Received Wavelength           | 1310nm/1490nm  | XPON              |
|     |                                   | 1270nm/1577nm  | 10G PON           |
| 3   | Channel Isolation                 | >20dB  |                   |
| 4   | Optical reception responsiveness  | 0.85A/W(1550nm typical)  |                   |
| 5   | Input Optical Power Range         | -20dBm~+2dBm   |                   |
| 6   | Fiber Optic Types                 | Single mode(9/125mm)   |                   |
| 7   | Fiber Optic Connector Type        | SC/APC   |                   |
| 8   | Output Level                      | ≥78dBuV  |                   |
| 9   | AGC Range                         | -15dBm~+2dBm   | Output level ±2dB |
| 10  | F-type RF connector               | fractional   |                   |
| 11  | Frequency Bandwidth               | 47MHz-1003MHz  |                   |
| 12  | RF In-Band Flatness               | ±1.5dB   |                   |
| 13  | System impedance                  | 75Ω  |                   |
| 14  | Reflection Loss                   | ≥14dB  |                   |
| 15  | MER                               | ≥35dB  |                   |
| 16  | BER                               | <10 <sup>-8</sup>  |                   |
| 17  | Product Size                      | 95mm(L)×71mm(W)×25mm(H)  |                   |
| 18  | Product weight                    | 75g  |                   |
| 19  | Work conditions                   | Temperature: 0°C--+45°C<br>Humidity: 40%--70% (non-condensing)   |                   |
| 20  | Storage conditions                | Temperature: -25°C--+60°C<br>Humidity: 40%--95% (non-condensing) |                   |

WDM Performance Description:

| Parameter                       | Symbol | Min. | Typ. | Max. | Unit | Test Conditions    |
|---------------------------------|--------|------|------|------|------|--------------------|
| Transmission Working Wavelength | λ1     | 1540 | 1550 | 1560 | nm   |                    |
| Reflected Working Wavelength    | λ2     | 1260 | 1310 | 1330 | nm   |                    |
|                                 | λ3     | 1480 | 1490 | 1500 | nm   |                    |
|                                 | λ4     | 1575 | 1577 | 1650 | nm   |                    |
| Degree of Response              | R      | 0.85 | 0.90 |      | A/W  | po=0dBmλ=1550nm    |
| Transmission isolation          | ISO1   | 30   |      |      | dB   | λ=1310&1490&1577nm |
| Reflection isolation            | ISO2   | 18   |      |      | dB   | λ=1550nm           |
| Return Loss                     | RL     | -40  |      |      | dB   | λ=1550nm           |
| Insertion Loss                  | IL     |      |      | 1    | dB   | λ=1310&1490&1577nm |

Ordering Information:

| Product Name | Product Description | Power Configuration |
|--------------|---------------------|---------------------|
| V8801C-1     | Optical Receiver    | DC 12V 1A           |