

# GRS-5504 (950~5450MHz)

## 4 SAT-IF Optical Receiver

### PRODUCT DESCRIPTION

GRS-5504, a kind of 4-band SAT -IF O/E converter, which makes the superposed 4 ways SAT-IF signals in the band 950~5450MHz that transmitted by optic signal cleavage overlay and revert to standard VH,VL, HH, HL 4 ways SAT IF signal (SAT-IF) to output. It can connect 4 \* N satellite multi-channel switch, and then serve for multi-users.

GRS-5504/WD, GRS-5504/WF, can be compatible with any FTTx PON, to realize internet, Full-Band SAT-TV & CATV Triple-ply network and FTTH

GRS-5504 the forepart of the satellite antenna adopt satellite channel overlay LNB, such as TOL32, TWL01.



### PRODUCT FEATURES

- ▶ Adopt one fiber to transmit 4 ways polarization SAT-IF signal well
- ▶ GRS-5504 (Can connect 4\*N multi-switch)

### MAIN APPLICATION

- ▶ FTTH for DBS
- ▶ Triple-play Overlay DVB-S
- ▶ 4 SAT - IF overlay/ cleavage overlay optical fiber links

## TECHNICAL INDEX

| Performance       |                               |                    | Index          |      |      | Supplement                    |
|-------------------|-------------------------------|--------------------|----------------|------|------|-------------------------------|
|                   |                               |                    | Min.           | Typ. | Max. |                               |
| Optical feature   | CATV work wavelength          | (nm)               | 1260           |      | 1620 | GRS-5504                      |
|                   |                               |                    | 1540           |      | 1563 | GRS-5504/WF, GRS-5504/WD      |
|                   | Pass wavelength               | (nm)               | 1310, 1490     |      |      | GRS-5504/WD                   |
|                   | Channel isolation             | (dB)               | 40             |      |      |                               |
|                   | Responsibility                | (A/W)              | 0.85           |      |      | 1310nm                        |
|                   |                               |                    | 0.9            |      |      | 1550nm                        |
|                   | Receiver power                | (dBm)              | -15            |      |      |                               |
|                   | Optical return loss           | (dB)               | 40             | 45   |      | FC/PC, SC/PC                  |
|                   |                               |                    | 55             | 60   |      | FC/APC, SC/APC                |
|                   | Optical fiber connector       |                    | SC/APC         |      |      | Optional FC/APC, SC/PC, FC/PC |
| Frequency feature | Reception frequency range     | 4 SAT-IF Converted | (MHz)          | 950  |      | 5450                          |
|                   |                               | VL Converted       |                | 950  |      | 1950                          |
|                   |                               | VH Converted       |                | 1950 |      | 3000                          |
|                   |                               | HL Converted       |                | 3300 |      | 4400                          |
|                   |                               | HH Converted       |                | 4400 |      | 5450                          |
|                   | Frequency range               | VL                 | (MHz)          | 950  |      | 1950                          |
|                   |                               | VH                 |                | 1100 |      | 2150                          |
|                   |                               | HL                 |                | 950  |      | 1950                          |
|                   |                               | HH                 |                | 1100 |      | 2150                          |
|                   | Output                        |                    | (MHz)          |      |      |                               |
|                   |                               |                    |                |      |      |                               |
|                   |                               |                    |                |      |      |                               |
|                   |                               |                    |                |      |      |                               |
|                   | Gain ripple across band       | (dB)               | -3.0           |      | +3.0 |                               |
|                   | Gain ripple across 40MHz      | (dB)               | -0.5           |      | +0.5 |                               |
|                   | Channel isolation             | (dB)               |                | 30   |      |                               |
|                   | In band spurious power        | (dB)               | -25            |      |      |                               |
|                   | Out band spurious power       | (dB)               |                |      | -60  |                               |
|                   | Gain range                    | (dB)               | -1.0           |      | 36   |                               |
|                   | Output level                  | (dBm)              | -65            |      | -25  |                               |
|                   | Integrated phase noise        | (dB)               |                | 4.0  |      | 1KHz~13KHz                    |
|                   | OIP3                          | (dB)               | +10            |      |      |                               |
|                   | Output return loss            | (dB)               |                | 10   |      |                               |
|                   | Output impedance              | (Ω)                |                | 75   |      |                               |
|                   | RF number of connector output |                    |                | 4    |      |                               |
|                   | RF connector                  |                    | F-Female       |      |      |                               |
| General feature   | Power supply (DC)             | (V)                |                | +18  |      |                               |
|                   | Power consume                 | (mA)               |                |      | 300  |                               |
|                   | External power supply input   | (V)                | 90             |      | 265  |                               |
|                   | Operating temp.               | (°C)               | -30            |      | +60  |                               |
|                   | Storage temp.                 | (°C)               | -40            |      | +70  |                               |
|                   | Size                          | (mm)               | 143 × 167 × 27 |      |      | (W)×(D)×(H)                   |

## MODEL EXPLANATION

|                                 |  |                 |    |                        |                       |                      |    |                               |    |      |        |    |                 |
|---------------------------------|--|-----------------|----|------------------------|-----------------------|----------------------|----|-------------------------------|----|------|--------|----|-----------------|
| GRS                             |  | -               | 55 | 0                      | 4                     | /                    | □□ | -                             | □□ |      |        |    |                 |
| SAT receiver<br>(O/E convertor) |  | Work bandwidth  |    | Satellite multi-switch |                       | RF number of outputs |    | Optical connector             |    | CWDM |        |    |                 |
| 55                              |  | 950~5450<br>MHz |    | 0                      | Without               |                      | 4  | 4 satellite outputs           |    | SA   | SC/APC | NC | Without         |
|                                 |  |                 |    | 4                      | With 4 × 4Multiswitch |                      | 5  | 4 way satellite<br>1 Way CATV |    | FP   | FC/APC | WD | Build-in CWDM   |
|                                 |  |                 |    |                        |                       |                      |    |                               |    | SU   | SC/PC  | WF | Build-in Filter |
|                                 |  |                 |    |                        |                       |                      |    |                               |    | FP   | FC/PC  |    |                 |