

# GRS-6044 ( 950~5950MHz)

## 4 SAT-IF Optical Receiver (Built-in 4 \* 4 Satellite Switch)

### PRODUCT DESCRIPTION

GRS-6044, a kind of 4-band SAT-IF O/E converter, which makes the superposed 4 ways SAT-IF signals in the band 950~5950MHz that transmitted by optic signal cleavage overlay and revert to standard VH,VL, HH, HL 4 ways SAT if signal (SAT-IF), and then pass by the built-in 4 \* 4 satellite switch to output 4 way full-channel direct broadcasting satellite TV, and then serve for users.

GRS-6044/WD, GRS-6044/WF, can be compatible with any FTTx PON, to realize internet, Full-Band SAT-TV & CATV Triple-ply network and FTTH

GRS-6044 the forepart of the satellite antenna adopt satellite channel overlay LNB, such as LNB2204.



### PRODUCT FEATURES

- ▶ Adopt one fiber to transmit 4 ways polarization SAT-IF signal well
- ▶ GRS-6044 (built-in 4\*4 satellite switch)

### MAIN APPLICATION

- ▶ FTTH for DBS
- ▶ Triple-ply 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-6044                      |  |
|                 |                                     |  |       | 1540         |           | 1563       | GRS-6044/WF, GRS-6044/WD      |  |
|                 | Pass wavelength                     |  | (nm)  | 1310, 1490   |           |            | GRS-6044/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 range<br>Output           |  | VL    | (MHz)        | 950       |            | 1950                          |  |
|                 |                                     |  | VH    |              | 1100      |            | 2150                          |  |
|                 |                                     |  | HL    |              | 950       |            | 1950                          |  |
|                 |                                     |  | HH    |              | 1100      |            | 2150                          |  |
|                 | Polarized control                   |  | VL    |              | 13V+0Hz   |            |                               |  |
|                 |                                     |  | VH    |              | 13V+22KHz |            |                               |  |
|                 |                                     |  | HL    |              | 18V+0Hz   |            |                               |  |
|                 |                                     |  | HH    |              | 18V+22KHz |            |                               |  |
|                 | 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 isolation                    |  | (dB)  |              | 25        |            | 4×4 Satellite Switch          |  |
|                 | 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 voltage |  | (V)   | 90           |           | 265        |                               |  |
|                 | Operating temp.                     |  | (℃)   | -30          |           | +60        |                               |  |
|                 | Storage temp.                       |  | (℃)   | -40          |           | +70        |                               |  |
|                 | Size                                |  | (mm)  | 126 × 162×27 |           |            | (W)x(D)x(H)                   |  |

## MODEL EXPLANATION

|                                 |                          |                |                       |                        |                               |                      |        |                   |                 |      |  |
|---------------------------------|--------------------------|----------------|-----------------------|------------------------|-------------------------------|----------------------|--------|-------------------|-----------------|------|--|
| SAT receiver<br>(O/E convertor) |                          | Work bandwidth |                       | Satellite multi-switch |                               | RF number of outputs |        | Optical connector |                 | CWDM |  |
| 60                              | 950~5950 MHz<br>4 SAT-IF | 4              | With 4 × 4Multiswitch | 4                      | 4 satellite outputs           | SA                   | SC/APC | NC                | Without         |      |  |
|                                 |                          | 0              | Without               | 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  |                   |                 |      |  |