

## GNSS Satellite RF fiber link

GLB3500MG fiber link distributes satellite GNSS simulator RFs over fiber in the tunnel or subway for GPS/GLONASS/Galileo/Beidou services. GLB3500MG fiber link includes GLB3500HGT rack mount fiber optic transmitter, and GLB3500MR-DX GNSS transceiver. GLB3500HGT optical transmitter converts 3ch or 6ch or 9ch or 12ch or 15ch or 18ch GNSS RF at the CWDM wavelength independently. GLB3500MR-DX GNSS transceiver drops the GNSS RF of the CWDM channel and passes the remaining CWDM channels to the next GNSS fiber optic transceiver.



### Features:

- Aluminum Housing
- Sending up to 18 GNSS Simulator RFs over one SM fiber
- Each modular transmitter converting one GNSS RF into one CWDM wavelength
- One 19" 1RU housing have 6 slots, each slot for 3pcs modular transmitters
- All CWDM wavelengths are muxed in one SM fiber
- Each modular transceiver dropping one GNSS RF and passing other CWDM wavelengths
- Offering GPS/GLONASS/Galileo/Beidou services in the tunnel or subway
- Offering 5.0V DC power to GPS/GLONASS/Galileo/Beidou antenna
- high linearity laser and high linearity Photodiode
- Total 18ch CWDM wavelengths available
- GaAs Low Noise Amplifier
- Transceiver unit having both receiver module and re-transmitting module

## Specifications:

| Item                                                      | Parameter                                                                                   |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>GLB3500HGT transmitter</b>                             |                                                                                             |
| RF Input Connector                                        | SMA Female, 50Ohm                                                                           |
| DC Output Power at SMA connector                          | 5V 100mA on request                                                                         |
| GNSS simulator RF Frequency:<br>950~2150MHz<br>Supporting | GPS L1(1551~1612MHz)/L2(1197~1278MHz)<br>Beidou B1/B2/B3<br>GLONASS G1/G2<br>GALILEO E1/E5B |
| RF Return Loss                                            | >10dB                                                                                       |
| Optical Transmitter wavelength                            | 1270nm, 1290nm, 1310nm...1610nm<br>Total 18ch CWDM wavelength available                     |
| Optical Transmitter Output Power                          | >+5dBm                                                                                      |
| Fiber Optical Connector                                   | SC/APC, SM fiber                                                                            |
| Power to GPS Antenna                                      | 5.0V DC, Max 100mA                                                                          |
| Power Consumption of transmitter                          | < 30W                                                                                       |
| Dimension                                                 | 484×260×44(mm)                                                                              |
| Power Supply                                              | 100~240V AC                                                                                 |
| <b>GLB3500MR-Dxx transceiver</b>                          |                                                                                             |
| Input fiber connector                                     | SC/APC                                                                                      |
| Transmitting fiber connector                              | SC/APC                                                                                      |
| Dropping CWDM channel                                     | The appointed CWDM wavelength                                                               |
| Transmitting CWDM channel                                 | All except the dropped CWDM channels                                                        |
| Recommending input optical power                          | -12dBm ~ +10dBm                                                                             |
| RF Output connector                                       | SMA Female, 50Ohm,                                                                          |
| DC Output Power at SMA connector                          | 5V 100mA on request                                                                         |
| RF Frequency: 950~2150MHz<br>Supporting                   | GPS L1(1551~1612MHz)/L2(1197~1278MHz)<br>Beidou B1/B2/B3<br>GLONASS G1/G2<br>GALILEO E1/E5B |
| RF Flatness                                               | ≤2.0dB@Any 100MHz                                                                           |
| RF Return Loss                                            | >10dB                                                                                       |
| Power Consumption                                         | < 1.5W                                                                                      |
| Dimension                                                 | 88×50×21(mm)                                                                                |
| Power Supply                                              | 12V 0.5A Power adapter, UL or CE                                                            |
| <b>Environmental</b>                                      |                                                                                             |
| Working Temperature                                       | -20~+55 ℃                                                                                   |
| Storage Temperature                                       | -40~+85 ℃                                                                                   |
| Humidity                                                  | 5~95 % (non-condensing)                                                                     |

## Ordering Information:

GLB3500HGT-Y Ych GNSS RF fiber optic transmitter in 19" 1RU

Y (GNSS RF channel number): 3 or 6 or 9 or 12 or 15 or 18 (preset at factory)

GLB3500MR-DX GNSS transceiver receiving X channel and passing other channels

X (CWDM wavelength):

27\_1270nm, 29\_1290nm, 31\_1310nm, 33\_1330nm, 35\_1350nm, 37\_1370nm  
39\_1390nm, 41\_1410nm, 43\_1430nm, 45\_1450nm, 47\_1470nm, 49\_1490nm  
51\_1510nm, 53\_1530nm, 55\_1550nm, 57\_1570nm, 59\_1590nm, 61\_1610nm