



## GLB3500M-16 RF Fiber Link

GLB3500M-16 is a CWDM Satellite RF fiber link, transmitting 16 polarities 950~2150MHz Satellite RF from 4 Satellite Dishes and 1 terrestrial TV RF over one SM fiber to multi subscribers. Each CWDM optical wavelength carries one 950~2150MHz RF signal (or 174~2150MHz, including Terrestrial TV), ensuring excellent RF performance and mutual isolation among satellite polarities. GLB3500M-16 fiber link includes GLB3500M-16T optical transmitter and GLB3500M-16R optical receiver. With CWDM lasers/photodiode and low noise RF gain control circuit, one GLB3500M-16T can deliver high quality RF to maximum 32pcs GLB3500M-16R optical receivers within 5Km fiber distance.

### Features:

- Aluminum Metal housing with heat sink
- No fan design
- 16 sat polarity broadband RF 950~2150MHz
- One Terrestrial TV RF 174~806MHz
- 16 CWDM uncooled DFB Lasers from 1310nm to 1610nm
- AGC at optical transmitter and receiver
- Supporting maximum 5Km fiber distance at each 1×32 PLC output
- High Linearity Photodiode
- Excellent RF Isolation
- Low noise RF Gain Control circuit

### Specifications:

#### GLB3500M-16T Optical Transmitter

|                           |  |
|---------------------------|--|
| <b>RF Input</b>           |  |
| RF Input Port Number      | 17 (Four group Sat Quattro LNB inputs and Terr TV)   |
| RF Bandwidth at each port | Satellite: 950~2150MHz<br>Terrestrial TV: 174~806MHz |
| Minimum RF Input Power    | -50dBm   |
| Maximum RF Input Power    | -30dBm   |
| RF Connector              | F-Type, American Female                              |
| RF Return Loss            | >10dB  |
| RF Impedance              | 75 Ohm   |
| DC Power to Quattro LNB   | 13V, 18V   |
| RF AGC                    | Preset at 20 RF carriers in each satellite polarity  |
| RF Flatness               | ±3.0 dB  |
| <b>Optics</b>             |  |
| Optical Output Port       | One  |
| Fiber                     | 9μm/125μm Single Mode Fiber                          |
| Fiber Connector           | SC/APC   |
| Output optical wavelength | 1310nm~1610nm  |

|                             |  |
|-----------------------------|--|
| Laser                       | Uncooled CWDM DFB laser with one stage isolator  |
| Average CWDM Optical Loss   | <4.5dB@16 CWDM wavelengths   |
| Laser Output Power          | >10dBm (All CWDM wavelengths)  |
| LED Status                  | Green Color LED on the panel, representing laser Power and RF. LED “ON” when there is either Laser or RF signal. |
| <b>Physical</b>             |  |
| Power Supply                | Dual 19V 3A DC Power Adapter, CE Certified   |
| Power Consumption           | <50W (not including the power to four Quattro LNBS)  |
| Dimensions (W x H x D) mm   | 430×230×88 (19” 2RU)   |
| Operating Temperature ( °C) | -10 - +45  |
| Storage Temperature ( °C)   | -40 - +85  |
| Humidity                    | 10%~90% non-condensing   |
| Weight                      | 10Kg   |

**Optical Transmitter**



**Optical Receiver:**



**Ordering Information**

- GLB3500M-16T**    16 Satellite Polarities RF fiber optic transmitter
- GLB3500M-16R**    16 Satellite Polarities RF fiber optic receiver

**GLB3500M-16R Optical Receiver**

|                                       |  |
|---------------------------------------|--|
| <b>Optical Input</b>                  |  |
| Optical Input Port                    | One  |
| Fiber                                 | 9 $\mu$ m / 125 $\mu$ m Single Mode Fiber  |
| Fiber Connector                       | SC/APC   |
| Input optical wavelength              | 1200nm~1650nm  |
| Average CWDM Optical Loss             | <4.5dB@16 CWDM wavelengths   |
| Optical Input Power                   | -4dBm~+10dBm (All CWDM wavelengths)  |
| RF Output Ports                       | 16 (Four group Sat Quattro Outputs)<br>One Terrestrial TV  |
| RF Output Bandwidth                   | Sat: 950~2150MHz    Terr: 174~806MHz   |
| SAT RF Output                         | >-76dBuV@-6dBm each CWDM channel input<br>>-70dBuV@-10dBm each CWDM channel input<br>>-62dBuV@-18dBm each CWDM channel input               |
| RF Flatness                           | $\pm$ 3.0 dB   |
| RF Return Loss                        | 10dB   |
| RF Connector                          | F-Type, American Female  |
| RF Impedance                          | 75 Ohm   |
| IMD 2nd order                         | $\geq$ 32dB (two input tones at -15 dBm)   |
| IMD 3RD order                         | $\geq$ 52dB (two input tones at -15 dBm)   |
| <b>LED Status</b>                     | 17 Green Color LED on the panel, representing 16 sat RF Ports and Terr TV. LED "ON" when there is the signal on the corresponding RF port. |
| <b>Physical</b>                       |  |
| Power Supply                          | 12V 2A CE Certified Power Adapter with F connector, wall plug  |
| Power Consumption                     | <16W   |
| Dimensions (W x H x D) mm             | 350 x 230 x 44   |
| Operating Temperature ( $^{\circ}$ C) | -10 - +50  |
| Storage Temperature ( $^{\circ}$ C)   | -40 - +85  |
| Humidity                              | 10%~90% non-condensing   |
| Weight                                | <4Kg   |