GFD2000 Fiber Optic LNB Dongle

GFD2000 fiber optic LNB Dongle is a compact satellite TV fiber optic receiver installed at the RF port of satellite STB. Working with Greatway GLB3500MT optical transmitter, GFD2000 LNB dongle converts optical signal into Satellite RF. Powered by the 13V/18V DC from satellite receiver, GFD2000 outputs high quality satellite transponders by gain flattened design. GFD2000 has excellent satellite MER at extremely low optical input power (such as -18dBm). 1pcs GLB3500MT-D20 optical transmitter can drive up to 512pcs GFD2000 directly. The built-in 1550nm filter excludes 1490nm or 1577nm OLT signal from GFD2000 in GPON/XGPON FTTH system.



Features:

- Compact plastic flame retarding housing
- Installed on the RF port of Satellite STB
- Converting GLB3500MT optical transmitter signal into sat RF
- High Linearity Photodiode
- Low noise GaAs amplifier
- Wideband Gain Flattened design
- Output Maximum 32UB at 950~2150MHz
- Higher than 45dBuV@-15dBm
- Higher than 10dB MER@-18dBm
- Powered by satellite STB
- Built-in filter excluding 1490nm and 1577nm from PON
- Surge Protection at RF port
- Plug and Play

Specifications

Item	Parameter			
Input Optical Wavelength	1545nm~1565nm			
Working Optical Power	-18dBm ~ 0dBm@1550nm			
Optical Connector	SC/APC			
Optical Return Loss	45 dB			
RF Bandwidth	174 ~ 2350 MHz			
RF Flatness	$\pm 4.0 \mathrm{dB}$			
Satellite User Bands	32 (950~2150MHz)			
Each User Band bandwidth	36MHz (typical)			
RF Connector	American F Male			
RF Output Impedance	75Ω			
RF Output Level	45dBµV@-15dBm			
Typical MER	>10dB@-18dBm			
Environment				
Power Supply	13 V or 18V from satellite receiver			
Power Consumption	<0.5W			
Working Temperature	-20 ~ +60°C			
Housing Dimension (L*W*H)	36mm×28mm×9mm			
Weight	9g			

Ordering Information

GFD2000 Satellite TV fiber optic LNB Dongle

Optical Input Power	RF Output Level	MER		
0dBm	76dBµV	13.4dB		
-2dBm	72dBµV	13.4dB		
-4dBm	68dBµV	13.3dB		
-6dBm	64dBµV	13.3dB		
-8dBm	60dBµV	13.3dB		
-10dBm	56dBµV	13.2dB		
-12dBm	52dBµV	13.1dB		
-14dBm	48dBµV	13.0dB		
-16dBm	44dBµV	12.6dB		
-18dBm	40dBµV	11.9dB		
-20dBm	36dBµV	10.4dB		
-22dBm	32dBµV	6.5dB		

Test data of GFD2000 with Greatway GLB3500MT optical transmitter

Greatway Technology, connecting the world



GFD2000 Optical Input: -22dBm	SPECTRUM 2/3					
Freq: 1680.00 MHz Power: DL: 12090.00 MHz C/N:	32.6 dBµV 7.4 dB	MER: LM:	6.6 dB 0.5 dB	CBER: VBER:	1.4E-02 3.1E-04	
50		CETV2 CETV2			A TALISAN	
	1275.00				helper ^{all} language la post	
TS locked (38.01 Mbps): Acquir	ing NIT			Span: 2	2050 MHz	
CH 20 DVB	-S	Tools		Adva	nced	