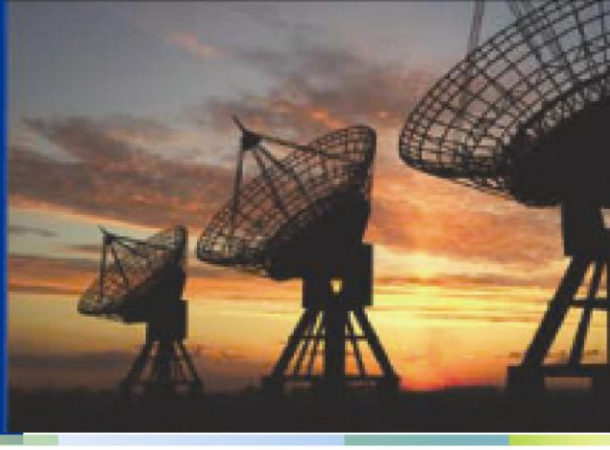
FOXCOM
Complete RF-2-Fiber Solutions



Sat-Light Gold Series

GL7220 L-Band Optical Downlink

Features & Benefits

- Optimized for Professional Satellite and Wireless Applications
- 10Km Transmission Distance
- Selectable VAR/AGC/MGC
- Front Panel Test Port
- Selectable LNB Powering
- Powerful Monitoring Features
- Compatible with all 1st Generation Sat-Light Products

Product Description

Foxcom's Sat-Light/Gold L-Band Interfacility Link offers a high performance, cost effective alternative to conventional coaxial-cabled systems. The Gold L-Band IFL covers the range of 950 to 2200MHz. The Gold Series L-Band link is designed for a wide range of satellite power levels. Foxcom's high dynamic range DFB laser delivers exceptional signal quality for the most demanding applications.

The new Gold series is compatible with first generation Sat-Light 7000 Series platform. The Gold Series support L-Band, 70/140MHz IF, Wideband (10-2200 MHz), 10MHz Reference, Redundancy, M & C, SNMP, Ethernet, and Serial Data Communication.

The link consists of an optical transmitter, which receives the RF signal from an LNB or LNA, and an optical receiver that connects to the indoor receiver equipment. All satellite modulation schemes are accommodated – digital or analog. Inherently low phase is achieved by direct modulation of the laser diode.

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Specifications

GL7220 L-Band Optical Downlink [950-2200MHz], 4dB Optical Budget

RF Specifications	Units	Typical	Minimum	Maximum
Frequency Range	MHz	950-2200MHz		
Link Gain	dB	Adjustable	-10	+10
Amplitude Response @ Unity Gain 950-2200MHz any 36 MHz	dB	 ±2 ±0.25		 ±2.2 ±0.3
Gain Stability	dB/24hr	±0.25		±0.3
SFDR1	dB/Hz2/3	103	100	
CNR [any 36 MHz][1]	dB	60	55	
Noise Figure (NF)[1]	dB	22		21
Output IP3 (OIP3) [2]	dBm	+5	0	
Third Order InterModulation [IMD][3]	dBc	Adjustable	55	30
Group Delay Variation- linear 950 - 2200MHz	ns	4		5
Input Signal Range - Total Power	dBm		-45	-20
Output Signal Range - Total Power	dBm		-45	-20
Maximum Input without Damage	dBm		+15	
Input/Output Impedance	75 or 50			
TX/RX Input/Output return loss 50 Ohm 75 Ohm	dB	 -14 -12		 -14 -12
RF Connector Type Input/Output Test Port		 F, SMA BNC		
Test Port [front panel sample port]	dB	-20	-22	-18
Optical Specifications	**Unit**	**Typical**	**Minimum**	**Maximum**
Optical Power Output	dBm	3	1	4
Optical Budget / Distance 4 dB optical budget	dB/Km	1310 nm | 1550 nm 8 |15		
Optical Connector Types		FC/APC or SC/APC		
Optical Wavelength	nm	1310/1550/CWDM		
Electrical Specification				
Supply Voltage	Vdc	13	12.7	18
Supply Current [TX][4]	Amps	0.4		
Supply Current (RX)	Amps	0.3		
Physical Specifications				
Operating Temperature Range			-10	+55
Dimensions [D×W×H]				
MTBF	Hours	TX: 309,481 RX: 359,057		

1. -25dBm RF input, unity gain, IMD=-40 dBc @ 1 meter fiber
2. -25dBm RF Output, IMD=-40dBc
3. User adjustable
4. Under 10ºC add 120 mA [laser heating]

Ordering Information
GL7220-T – Gold L-Band Downlink Transmitter
GL7220-R – Gold L-Band Downlink Receiver