FOXCOM
Complete RF-2-Fiber Solutions

GL952SD S-Band Link

Features & Benefits:

- High Input Power (-10 to –30dBm)
- 10Km Transmission Distance
- Selectable AGC/MGC
- Front Panel Test Port
- Powerful Monitoring Features
- Compatible with all 1st Generation Sat-Light Products

Product Description

Foxcom'sBB Sat-Light/Gold S-Band Interfacility Link offers a high performance, cost effective alternative to conventional coaxial-cabled systems. Sat-Light/Gold L-Band IFL covers the range of 2000 to 4000MHz. The Gold Series S-Band link is designed for a wide range of satellite uplinking facilities whereby high input power levels are required. Foxcom's high dynamic range DFB laser delivers exceptional signal quality for the most demanding of uplink applications.

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

The link consists of a high input power optical transmitter, which receives the RF signal from an L-band modem, and an optical receiver that connects to the antenna BUC. All satellite modulation schemes are accommodated –digital or analog. Inherently low phase is achieved by direct modulation of the laser diode.

Specifications

GL952SD RF Optical Link
[S-Band 2000-4000MHz], 4dB Optical Budget

RF Specifications	Units	Typical	Minimum	Maximum
Frequency Range	MHz	2000-4000MHz		
Link Gain	dB	Adjustable	-10	+10
Amplitude Response @ Unity Gain 2000-4000MHz any 36 MHz	dB	 ±2.2 ±0.25		 ±2.5 ±0.3
Gain Stability	dB/24hr	±0.25		±0.3
SFDR1	dB/Hz2/3	103	100	
CNR [any 36 MHz]1	dB	54	52	

GL952SD RF Optical Link
[S-Band 2000-4000MHz], 4dB Optical Budget

Noise Figure (NF)2	dB	18		21
Output IP3 (OIP3) 3	dBm		+15	
Third Order InterModulation [IMD]4	dBc	Adjustable	55	40
Group Delay Variation- linear 2000- 4000MHz	ns	4		5
Input Signal Range - Total Power	dBm		-30	-5
RF Output Signal Range - Total Power	dBm		-25	0
Maximum Input without Damage	dBm		+15	
Input/Output Impedance	50			
TX/RX Input/Output return loss 50 Ohm 75 Ohm	dB	 -14 -12		 -14 -12
RF Connector Type Input/Output Test Port		 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		
Optical Wavelength	nm	1310/1550/CWDM		
Electrical Specification				
Supply Voltage	Vdc	13	12.7	18
Supply Current [TX]5	Amps	0.4		
Supply Current (RX)	Ampls	0.3		
Physical Specifications				
Operating Temperature Range			-10	+55
Dimensions [D×W×H]				
MTBF	Hours	TX: 309, 481 RX: 359, 057		

Digisat International Inc.
4195 W. New Haven Ave., Suite 15
Melbourne, FL 32904
USA
+1-321-676-5250
Email: sales@digisat.org
http://www.digisat.org

1. 0dBm RF input, unity gain, IMD=-40 dBc @ 1 meter Fiber
2. -25dBm RF input, 20dB Gain, IMD=-40 dBc
3. 0dBm RF Output, IMD=-40dBc
4. User adjustable
5. Under 10ºC add 120 mA [laser heating]