



Glowlink® GL950

Downconverter/Switch Unit

Product Overview

Glowlink's GL950 is an integrated downconverter and switch unit packaged in a compact 1RU, 19-inch chassis. The unit can switch and tune between multiple extended L-band inputs (950 to 2150 MHz). The GL950 can be locked to an external 10 MHz reference, or automatically switch to its built-in internal reference source.



The GL950 Downconverter/Switch Unit is available with up to four 8-port solid state switches and up to four independent, precision L-band downconverters, making it ideal for operations with Glowlink's spectrum monitoring (single- and dual-channel configurations) and geolocation systems.

Downconverting and switching operations are controlled via a serial interface, with fast, reliable switch and retune/settle speeds for improved spectrum monitoring and geolocation performance.

GL950 Downconverter/Switch Configurations	
Configuration	Description
4x1	(4) Inputs, (1) Output
8x1	(8) Inputs, (1) Output
16x1	(16) Inputs, (1) Output
24x1	(24) Inputs, (1) Output
32x1	(32) Inputs, (1) Output
Downconverters	
Extended L-band (950-2150 MHz)	Qty (1), (2), or (4)

Standard configurations listed. Contact Factory for customized configurations

Key Feature Benefits

- Extended L-Band input covers 950 – 2150 MHz band
- 30 dB adjustable gain in 1 dB increments
- Rapid switching and tuning speed with fast settle time
- Automated switching to external 10 MHz reference
- Seamless integration with Glowlink spectrum monitoring and geolocation products
- Phase noise performance exceeds IESS-308/309 standards



GL950 TECHNICAL SPECIFICATIONS

OUTPUT CHARACTERISTICS

Impedance	50 Ω
Frequency	70 MHz (other IF outputs available)
Output P1dB	+10 dBm
Connector Type	SMA (female)

CHANNEL CHARACTERISTICS

Gain Range	10 to 40 dB
Gain Step Size	1 dB
Image Rejection	>50 dB
Spurious Response	-60 dBc at 0 dBm Output
Gain Flatness	± 0.5 dB (over IF bandwidth)
Group Delay	3 nSec
Frequency Sense	No Inversion

SYNTHESIZER CHARACTERISTICS

Frequency Step Size	125 kHz
Phase Noise @	
10 Hz	-65 dBc/Hz
100 Hz	-75 dBc/Hz
1 kHz	-85 dBc/Hz
10 kHz	-90 dBc/Hz
100 kHz	-110 dBc/Hz
1 MHz	-130 dBc/Hz
Internal Reference	10 MHz
Int. Ref Stability	± 1 ppm Max, 0° to 50° C
External Reference	10 MHz
Ext. Ref. Level	-3 to +3 dBm
Input Impedance	50 Ω
Ext. Ref. Connector	SMA (female)

TUNING CHARACTERISTICS

Tuning Speed	80 mSec typical
Settling Time	3 mSec typical

CONTROL INTERFACE

Serial I/O	RS232
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PHYSICAL

19-Inch Rack mount	EIA RS-310C Standard, 1U Height
Weight	15 lbs (6.8 kg)
AC Power	110/220VAC $\pm 10\%$, 47-63 Hz
Power Consumption	20 W typical, 100W Max

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