



Glowlink® Model 8000

Geolocation, Interference Detection and Spectrum Monitoring System

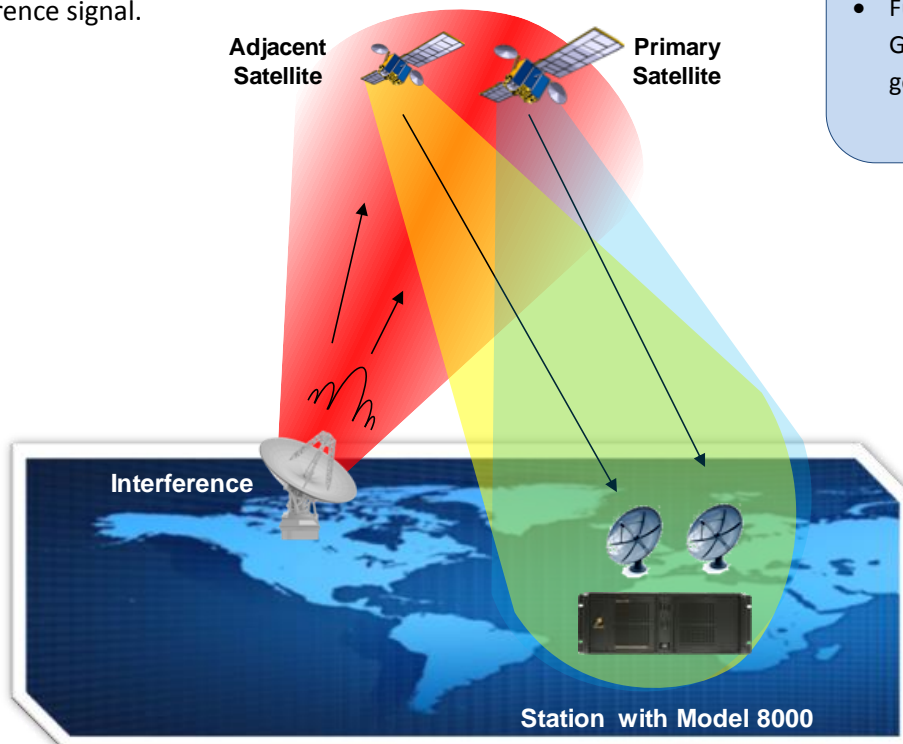
Product Overview

Glowlink's Model 8000 is an integrated interference detection and geolocation system. Geolocation operators can use the Model 8000 for viewing real-time spectra on both Primary and Adjacent satellites, detecting and characterizing interferences, and seamlessly transitioning from detecting interference to geolocating the interference with a single mouse point-click.

Using Glowlink patented and proprietary technologies, the Model 8000 can geolocate transmit terminals quickly and accurately. Its high performance 115 dB dynamic range and 72+ dB processing gain, unmatched by other products on the market, contribute to its success and wide market acceptance.

Geolocation Operations

The Model 8000 geolocates interference signals by taking advantage of the fact that adjacent satellites will receive a weak replica of the interference signal. Downlinks from the Primary and Adjacent satellites are acquired and analyzed by the Model 8000 to extract precision time-difference and/or frequency difference information used for locating the interference signal.



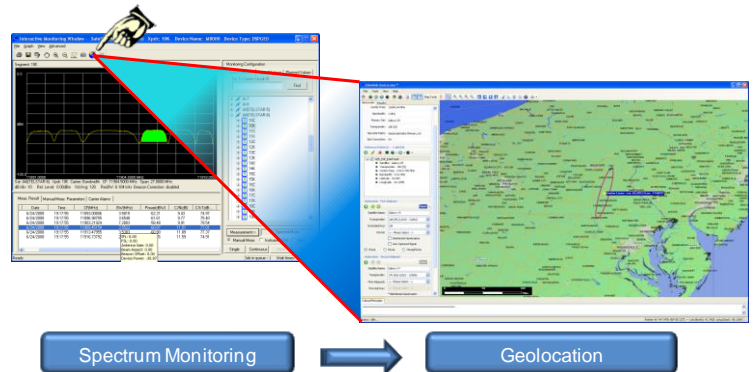
Key Feature Benefits

- Built-in spectrum monitoring capabilities for rapid interference detection and geolocation
- Unmatched performance and ease-of-use
- Geolocation in 4 simple steps
- Effective in locating fast sweepers and hopping interferences
- Distributed geolocation capabilities
- Effective across L, C, X, Ku and Ka bands
- Single chassis construction eases transport, installation, and maintenance
- Fully compatible with Glowlink GS380L for enhanced geolocation performance

FEATURES AND BENEFITS OF THE MODEL 8000

Built-in Interference Detection and Spectrum Monitoring in One Chassis

Seamlessly transitions from interference detection and characterization to geolocation.



Guided Geolocation

Geolocates interference in four simple steps.

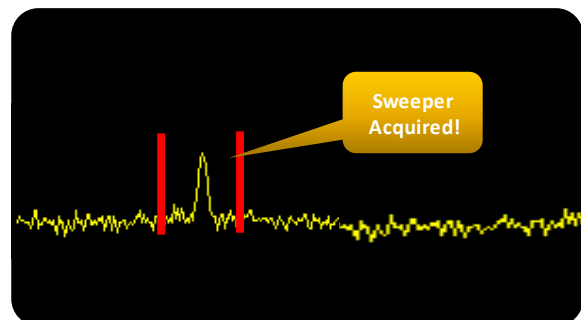


Centralized System Database

The Model 8000's centralized database stores carrier monitoring and geolocation system parameters, measurement results and other data needed for geolocation.

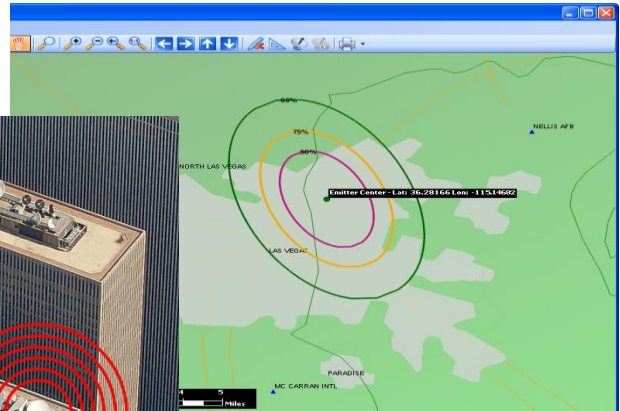
Sig-Catcher™

SigCatcher™ acquires and geolocates fast-sweeping and frequency-hopping signals.



Patented Geolocation Technology

Geolocation can be run with one, multiple or even no reference, with unparalleled accuracy.

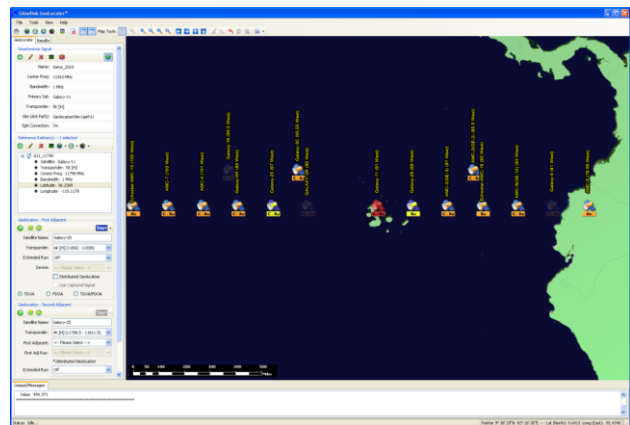


Advanced Error Correction (AEC™)

AEC™ improves accuracy by correcting errors in ephemeris.

Automated Adjacent Satellite Selection

Facilitates selecting of adjacent satellites, eliminating the otherwise tedious background research required by other systems on the market.





MODEL 8000 TECHNICAL SPECIFICATIONS

MEASUREMENT ACCURACY

Carrier Power:	+/- 0.2dB ¹
Center Frequency:	+/- 0.75% of BW ²
Carrier Frequency:	+/- 0.05% of BW + 100 Hz ¹
Carrier Bandwidth:	+/- 0.5% ¹
C/N, C/kT:	+/- 0.25 dB ¹

1. Accuracy measured with C/N = 10 dB
2. Typical for C/N = 14 dB

CHARACTERIZATION/DETECTION CAPABILITIES

Modulation Type	Identifies PSK, APSK, QAM and other modulations
Symbol Rate	Measured symbol rate of digital carrier
Carrier Frequency	Carrier frequency of digital carrier
Transmission rate	Demodulator output bit rate
Es/No	Measured from demodulated carrier
Eb/No	Referenced to demodulator
FEC*	Convolutional (IESS-308,309,310, DVB-S), LDPC (DVB-S2) and others

Contact Factory for details

FRONT END CHARACTERISTICS (EACH CHANNEL)

Input Frequency	L-band (950-2150 MHz)
Instantaneous BW	36 MHz
Resolution Bandwidth	97.66kHz to 12 Hz
Full Bandwidth Input Power	-65 to -5 dBm
Max Input Level	0 dBm
Dynamic range	115 dB nominal
Minimum Carrier Level	1 kHz carrier BW: -85 dBm, 10 kHz carrier BW: -75 dBm, 100 kHz carrier BW: -65 dBm, 1 MHz carrier BW: -55 dBm, 10 MHz carrier BW: -45 dBm
Connector Type	50 ohm, BNC

CONTROL INTERFACE

Network	Ethernet (RJ-45)
Additional	USB, Serial

PHYSICAL

19-Inch Rack mount	EIA RS-310C Standard, 4U Height (2U Optional)
Power	110/220VAC ± 10%, 47-63 Hz

MODEL 8000 OPTIONS

Monitoring	Transponder Operating Point (TOP™), Paired Carrier Monitoring, 4x Acceleration for Signal Characterization, Audible and Visual Alarm, Fine resolutions, High order modulations, DVB/DVB-S2 Analysis Package
Geolocation	G-Wiz™ Guided Geolocation, Distributed Geolocation, Advanced Error Correction (AEC™), SigCatcher™ Signal Acquisition, Automated Frequency Offset Measurement, TDOA/FDOA Contour Maps, Geolocation Performance Estimator, Ephemeris Propagator, Multiple Overlapping Signal Exclusion
System Functionality	Cross-Pol Isolation, Interfacility link Calibration, Antenna Pattern Measurement, Signal Recorder, Web-Server™, Email Notification, User Account Manager
Hardware Solutions	Integrated switching, 2U Rack mount chassis, Removable disk drive, Redundant, hot swappable power supply

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