

# Glowlink® SG200

## Satellite Spectrum Generator



***The SG200 is a powerful, flexible satellite spectrum generator that stores, retrieves, and synthesizes standard and custom RF signals needed for development and testing in today's increasingly complex satellite communications networks.***

### Product Overview

The SG200 is a sophisticated satellite signal waveform generator ideal for development, testing, and training applications. It generates a variety of modulated signals – including both Time Division Multiple Access (TDMA) and frequency hopped signals – encountered in today's increasingly complex satellite communications networks. Using standard web browser-based technology, the SG200's graphical user interface makes it easy to select from its library of standard and custom satellite signals. The selected satellite signal is synthesized as an analog waveform at IF band. A true 16-bit resolution arbitrary waveform generation and flexible RF tuner generate the modulated signals.

Now available with the SG200 are a set of custom synchronization signals that match those generated by the Wideband Global SATCOM (WGS) satellite. The SG200 generates a repeatable WGS scan sequence, cycling continuously through the individual dwell segments. Each dwell segment has the WGS synchronization signal and a distinct Frequency Division Multiple Access (FDMA) signal. The dwell period is selectable in a range between 400 milliseconds to 10 seconds.

In addition to its standard library of signals, Glowlink can provide other customized waveforms for the SG200. Signals having customized modulations, coding schemes, symbol rates, carrier powers, etc. can be constructed to support your testing needs. The combined flexibility and power of the SG200 makes all these possible. For more information please contact Glowlink.

### SG200 Product Features

- Stores, retrieves and synthesizes standard and customized satellite signals
- Combines high-resolution waveform generation with flexible RF tuner
- Capable of generating signals up to 2 GHz
- Provides capability to generate a wide range of standard and customized satellite signals



# SG200 Technical Specifications

## Waveform Generation Characteristics

Frequency Range	60 to 80 MHz, 1500 MHz
Instantaneous Bandwidth	20.8 MHz
Output Power Range	-140 dBm to +10 dBm
Connector Type	SMA
Digital to Analog Conversion	16-bits resolution, 100 MS/s
Waveform Memory	256 MBytes

## Signal Generation Capabilities Options

TDMA Signal	QPSK 2 MBaud carrier
Frequency Hop Signal	1 kHz hop rate in a 10 MHz hop bandwidth 10 kHz hop rate in a 10 MHz hop bandwidth 20 kHz hop rate in a 10 MHz hop bandwidth 40 kHz hop rate in a 10 MHz hop bandwidth
WGS Scan Sequence Signal	BPSK, QPSK signals at various dwell periods QPSK signals at various dwell periods WGS Scan sequence termination signal

### Contact Us

**Glowlink Communications Technology, Inc.**  
333 Distel Circle  
Los Altos, California 94022

**Phone: (650) 237-0223**

**Fax: (650) 237-0225**

**[www.glowlink.com](http://www.glowlink.com)**

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#### Glowlink Related Patents

With respect to the Glowlink product(s) described in this document, the following patents may apply:

United States Patent No(s): 8,004,459; 7,639,761; 7,466,767; 7,120,392; 6,549,755, New Zealand Patent No(s): 529266; 533787, Singapore Patent No(s): 100422; 105251, Australia Patent No(s): 2002340512; 200321579, Europe Patent No(s): 1393472, Canada Patent No(s): 2446301, China Patent No(s): ZL2812548.7, Hong Kong Patent No(s): 1066941.

Other U.S. and International Patents Pending



Glowlink Communications Technology, Inc.  
Los Altos, California 94022  
[www.glowlink.com](http://www.glowlink.com)