Giga-tronics

Preliminary Technical Datasheet



The Titan System

GT-2620A High-Power Microwave Signal Generator System
2 GHz to 20 GHz

Broadband High-Power Microwave Signal Generator

The Titan System

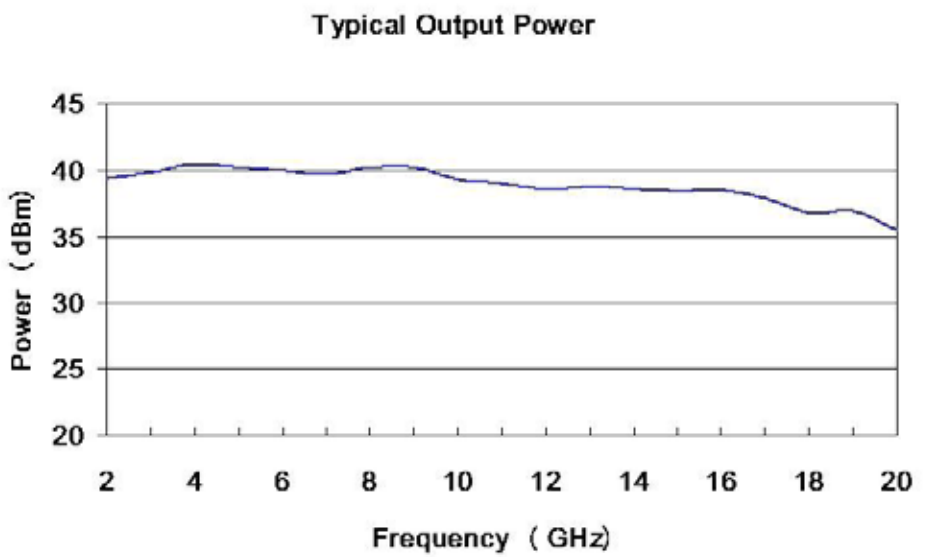
High-Power Signal Generation

Ideal for Microwave R&D labs, Antenna, EMC, and EW Test Applications

- 2 GHz to 20 GHz, up to +40 dBm (10 Watts)
- Solid-State Broadband - No TWTA, No Switching of Narrowband Amplifiers
- Amplifier Output Power Set Directly on the Signal Generator
- High stability Time Base for excellent Frequency Accuracy
- Low Phase Noise, Low Harmonics and Low Spurious for Super Clean Signals
- Simple, Fast Calibration with Giga-tronics Power Meter and Sensor

The GT-2620A High-Power Microwave Signal Generator System, Giga-tronics' Titan System, provides significantly higher power levels at microwave frequencies than are available from stand-alone signal generators, while maintaining a calibrated level controlled by the signal generator. This capability provides benefits in test productivity and throughput, eliminating the time and cost of manually measuring and setting the amplifier output power level, or developing and automating an external measurement scheme.

The Titan System is built around the Giga-tronics 2520A high-performance microwave signal generator featuring Giga-tronics patented Accumulative High Frequency Feedback (AHFF) technology that delivers excellent close-in phase noise and fast switching speed, and the Giga-tronics GT-1000A microwave power amplifier incorporating Spatium™ spatially-combining solid-state amplifier technology that delivers exceptionally wide bandwidth, low noise amplification.



Technical Specifications

Frequency Range

2 GHz to 20 GHz

Output Power

Output power is specified as minimum saturated power into 50 Ohms load, at 23ºC ± 5ºC.

Frequency	Specifications
2 to 8 GHz	+40 dBm (10 Watts) typical, +38.5 (7 Watts) minimum
8 to 12 GHz	+38.5 dBm (7 Watts) typical, +37 (5 Watts) minimum
12 to 18 GHz	+37 dBm (5 Watts) typical, +36 (4 Watts) minimum
18 to 20 GHz	+36 dBm (4 Watts) typical

Leveled Output Power Control Range

0 dBm up to the minimum saturated output power.

Output Power Accuracy[1]

+/- 1.0 dB

All Other Specifications

For all other specifications, refer to the individual instrument technical datasheets

- Giga-tronics 2500A Microwave Signal Generator
- Giga-tronics GT-1000A Microwave Power Amplifier
- Giga-tronics 8650A Universal Power Meter
- Giga-tronics 80325A Power Sensor

[1] Measured using the calibration Power Meter (8651A and 80352A Sensor) within ± 5ºC of the calibration temperature

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Ordering Information

Giga-tronics has a network of RF and Microwave instrumentation sales engineers and a staff of factory support personnel to help you find the best, most economical instrument for your specific applications. In addition to helping you select the best instrument for your needs, our staff can provide quotations, assist you in placing orders, and do everything necessary to ensure that your business transactions with Giga-tronics are handled efficiently.

Model Number	Description
GT-2620A	2 to 20 GHz High-Power Microwave Signal Generator System

Available Options and Accessories

Option	Description
01	Replace 8651A with 8652A Dual Input Power Meter
02	Delete Power Meter and Power Sensor (See note below)

Note that the 8651A (or 8652A) Power Meter and 80325A Power Sensor are integral to the system. They are required for system calibration. Option 02 is only applicable if an 8651A (or 8652A) and 80325A are available for use with the system.

Items included with the GT-2620A

Item	Description
2520AS	Microwave Signal Generator, 2 GHz to 20 GHz Option 18, Delete 100 kHz to 2 GHz
GT-1000A	Microwave Power Amplifier, 2 GHz to 20 GHz Option 01, Adds Coupler/Detector Option 03, Type-N Output Connector
8651A	Universal Power Meter (Single Input)
80325A	Power Sensor, 50 Watt, 10 MHz to 18 GHz

Giga-tronics Support Services

At Giga-tronics, we understand the challenges you face. Our support services begin from the moment you call us. We help you achieve both top-line growth and bottom-line efficiencies by working to identify your precise needs and implement smart and result orientated solutions. We believe and commit ourselves in providing you with more than our superior test solutions. For technical support, contact:

Tel: 1-800-726-GIGA (4442) or (925) 328-4669
Email: support@gigatronics.com

Updates

All data is subject to change without notice. For the latest information on Giga-tronics products and applications, please visit out website:

http://www.gigatronics.com



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