

8650B Universal Power Meter

10 MHz to 50 GHz

Key Features

- Large selection of Power Sensors
- Accurate and linear over a 90 dB range
- Fast measurement speed
- Average (CW), peak, pulse and modulated
- Built-in frequency response calibration
- Gating and triggering
- Statistical analysis
- GPIB, USB and Ethernet

Benefits

- 10 MHz to 50 GHz performance eliminates the need for multiple power sensors providing reduced cost and complexity while increasing reliability.
- Measure complex signals over wide dynamic range easily with high linearity and accuracy.
- Fast measurement speed and complete connectivity is ideal for automated test system applications.

Introduction

The Giga-tronics 8650B series universal power meters have the extensive measurement capabilities and unique features required to test today's sophisticated communications systems faster and more accurately.

The 8650B can measure the CW power, peak power and average power of TDMA, GSM, and CDMA signals. CW measurement speeds (readings/second) over GPIB are > 1,750 and modulated measurement speeds are > 300. And the meter includes many time saving features such as automatic time gate setting, direct crest factor measurement, and statistical power measurement analysis.

Giga-tronics diode sensors provide speed, dynamic range, and accuracy over a 90 dB range with power levels from -70 dBm (100 pW) up to +47 dBm (50 Watts) and frequency ranges from 10 MHz to 50 GHz and modulation bandwidths up to 10 MHz.



Best Cost-Performance Value in its Class

The 8650B series universal power meters consist of state-of-the-art digital signal processing and microwave diode detectors with internal thermistor temperature compensation and built-in frequency response calibration, giving you thermistor accuracy plus diode speed for measuring signals over a full 90 dB power range.

The 8650B provides a range of statistical power measurement analysis features that help you optimize your designs to prevent inadequate performance due to under design or excessive cost due to over design. These features include crest factor, standard deviation, strip chart, CDF/CCDF and histogram, and they let you view and thoroughly analyze the power signal over a selected period of time. Combined, they make the 8650B one of the most advanced power meters available.

Key RF Specifications

- Frequency Range: 10 MHz to 50 GHz
- Power Range: -70 dBm to +47 dBm (100 pW to 50 Watts)
- Display Resolution: 0.001 dB (Log), 4 digits (Linear)
- Modulation Bandwidth: > 10 MHz
- Measurement Modes: CW, Peak (Pulse), MAP/PAP/BAP
- Instrument Linearity: ± 0.02 dB
- 0 dBm Accuracy: $\pm 1.2\%$

Key General Specifications

- Channels: Single (8651B) or Dual (8652B)
- Averaging: Auto or Manual, Over Time or Number of Readings
- dB Relative and dB Offset: -99.999 to +99.999
- Displays: A, B, A/B, B/A, A-B, B-A, DLYA, DLYB
- Sample Rate: 2.5 to 5 MHz asynchronous
- Remote Control: GPIB, USB, Ethernet and Serial



About Giga-tronics:

Founded in 1980, Giga-tronics Incorporated (Nasdaq "GIGA"), an ISO 9001 and AS 9100 certified company, headquartered in San Ramon, California, is a leading engineering-and-design manufacturer of best-in-class RF and microwave signal generators, microwave power amplifiers, USB power sensors, microwave power meters and broadband switching matrices. R&D, production and test managers, scientists, engineers and technicians, around the world, use Giga-tronics test equipment to realize higher productivity and greater ease of use in many applications: ATE systems, aerospace & defense, communications and general microwave component test.



Contact information:

4650 Norris Canyon Road, San Ramon, CA 94583-1320

Tel 800.726.GIGA (4442) | Fax 925.328.4700 | Email inquiries@gigatronics.com | Web www.gigatronics.com