

GIGA-TRONICS

80601A

The Giga-tronics 80601A is a modulated power sensor designed for precise average power measurements of modulated and CW RF signals. Operating across a frequency range of 10 MHz to 18 GHz, it is optimized for use with Giga-tronics 8540 and 8650 series power meters.

SPECIFICATIONS

General

Interfaces	Dedicated multi-pin sensor cable interface for connection to Giga-tronics power meters
Display	None (utilizes compatible host power meter display)

Physical

Power Supply	Powered directly via connection to host Giga-tronics power meter
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	36 mm (Dia) × 147 mm (L) mm

Measurement Ranges & Power Specifications

Frequency Range Minimum	10 MHz
Frequency Range Maximum	18 GHz
Power Measurement Range Minimum	-67 dBm
Power Measurement Range Maximum	+20 dBm
Maximum Continuous Input Power	+23 dBm (200 mW)
Maximum Peak Input Power	+23 dBm (200 mW)

Sensor Technology & Architecture

Sensor Detection Type	Modulated Diode
Measurement Modes Supported	Average power of CW and modulated signals (e.g., TDMA, CDMA, GSM)

RF Port Characteristics

Input Impedance	50 Ω
RF Connector Type	Type N
Connector Sex	Male
Maximum SWR (10 MHz to 2 GHz)	1.12
Maximum SWR (2 GHz to 12.4 GHz)	1.22
Maximum SWR (12.4 GHz to 18 GHz)	1.37

Meter Compatibility & System Integration

Compatible Power Meter Models	Giga-tronics 8540B, 8540C, 8650A, 8650B series
Calibration Factor Storage Type	Internal EEPROM (automatically downloaded to power meter)

Environmental Parameters

Operating Temperature Range	0 to +50 °C
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Performance

Zero Set	< 50 pW
Modulation Bandwidth	40 kHz
CW Power Measurement Range	-67 to +20 dBm
Modulated Power Measurement Range	-50 to +20 dBm
CW Dynamic Range	87 dB
Modulated Dynamic Range	70 dB

Calibration

Calibration Reference Frequency	50 MHz
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Environmental

Storage Temperature Range	-40 to +75 °C
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Connectivity

Sensor Cable Connection	Detachable (requires standard Giga-tronics sensor cable)
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TECHNOLOGY

Modulated Diode Power Sensor

APPLICATIONS

RF and Microwave Power Measurement

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.