GIGA-TRONICS

58542

The Giga-tronics 58542 is a dual-channel VXIbus Universal Power Meter designed for high-speed automated testing. It offers exceptionally fast CW measurements exceeding 150 readings per second over GPIB, along with an exclusive Burst Mode capable of capturing over 5000 readings per second. When paired with Giga-tronics peak power sensors, it enables precise pulsed RF measurements and detailed waveform analysis via a dedicated detector output and software-controlled markers.

SPECIFICATIONS

General

Interfaces	VXIbus, GPIB (via VXI translator)
Display	None (modular VXIbus blank front panel)

Physical

Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	VXIbus C-size (single-slot) mm

Measurement Capabilities and Performance

Number of Channels	2
CW Measurement Speed	> 150 readings/second (over GPIB)
Burst Mode Measurement Speed	> 5000 readings/second
Measurement Types	CW, Pulsed RF
Pulsed RF Capability	Supported using Giga-tronics peak power sensors
Frequency Range	10 MHz to 50 GHz (sensor dependent)
Power Measurement Range	-70 to +47 dBm (sensor dependent)

Sensor Compatibility and Connection

Waveform Display Output	Detector output connector from sensor to display waveform on oscilloscope
Compatible Sensors	Giga-tronics 80300A, 80350A, 80400A, and 80600A series power sensors

Software and Remote Programming

Marker Power Measurement	Computer-controlled marker position for precise point-on-waveform measurement

Physical and Power Specifications

Form Factor	VXIbus C-size, 1-slot

VXIbus Interface

VXI Device Type	Message-Based
VXI Slot Requirement	1-slot, C-size

Power Reference

Calibrator Frequency	50 MHz
Calibrator Power	1.0 mW (0 dBm)

Performance

Instrumentation Accuracy	±0.02 dB
Measurement Resolution	Selectable, up to 0.001 dB
Trigger Sources	Internal, External, Software

VXI Interface

VXI Interface Protocol	Message Based (Word Serial)

Software & Control

VXIplug&play Compliance	Yes

TECHNOLOGY

RF and Microwave Power Measurement

APPLICATIONS

Automated Test Equipment (ATE), VXIbus Instrumentation, Pulsed RF and CW 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.