

Wide Dynamic Range

USB Power Sensor

1 to 6000 MHz

50Ω -30 dBm to +20 dBm, 1 to 6000 MHz

Product Features

- 50 dB Dynamic range, -30 to +20 dBm
- Good VSWR, 1.1:1 typ.
- Low cost replacement solution for conventional power meters
- Easy installation and operation
- Turns your laptop into a power meter
- No need for a reference calibrator
- No need for an external power supply
- Temperature compensated
- Fully loaded software for power data analysis
- Averaging of measurements
- Scheduled Data recording
- Multi-Sensor support software
- Compatible with LabVIEW™, Delphi, C++ and Visual Basic software

LabVIEW is a registered trademark of National Instruments Corp.
 Delphi and C++ are registered trademarks of Codegear LLC.
 Visual Basic is a registered trademark of Microsoft Corporation.
 The Mini-Circuits USB Power Sensor is not affiliated with any of the programming software referenced above.



PWR-6G+

Order P/N	Description	Price	Qty.
PWR-6G+	USB Power Sensor plus accessories	\$695.00 ea.	(1-4)
PWR-SEN-6G+	Power Sensor Head		
USB-CBL+	Data Cable with USB Type-A plug connector		
NF-SM50+	N-Type Female to SMA-Male Adapter		
PWR-6GCD	Installation CD		

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

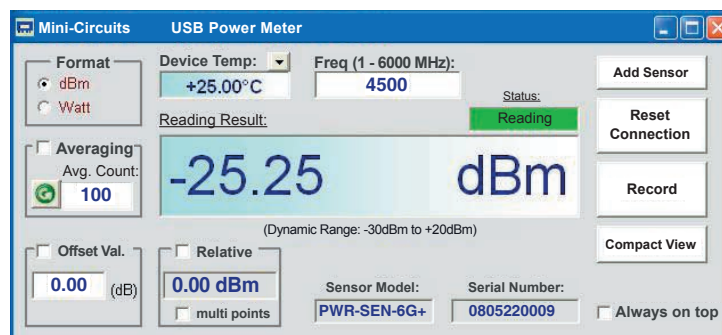
Typical Applications

- Lab Test equipment
- Portable Test capability
- Remote location testing

General Description

Mini-Circuits PWR-6G+ USB Power Sensor has a 50 dB dynamic range and is used with a PC via USB interface. The PWR-6G+ does not require any reference signal calibration. All specifications provided in the data sheet apply to continuous wave (CW) signals. The Mini-Circuits USB Power Sensor comes with Power Meter software that turns the PC into a Power Meter. It also comes with an N-Type female to SMA male adapter for enhanced utility.

Mini-Circuits Power Meter Program for USB Power Sensor



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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IF/RF MICROWAVE COMPONENTS



Rev. A
 M119736
 EDR-8769/5
 PWR-6G+
 RAV
 090114
 Page 1 of 4

Electrical Specifications, -30 dBm to +20 dBm, 1 to 6000 MHz

Parameter	Freq. Range (MHz)	Min.	Typ.	Max.	Units	
Dynamic Range	1 - 6000	-30	-	+20	dBm	
VSWR	1 - 6000	-	1.1	1.3	dB	
Uncertainty of Power Measurement @ 25°C	@ -30 to +5 dBm	1 - 3000	-	± 0.10	± 0.30	dB
		3000 - 6000	-	± 0.15	± 0.30	dB
	@ +5 to +12 dBm	1 - 3000	-	± 0.15	± 0.30	dB
		3000 - 6000	-	± 0.15	± 0.30	dB
	@ +12 to +20 dBm	1 - 3000	-	± 0.20	± 0.40	dB
		3000 - 6000	-	± 0.20	± 0.40	dB
Uncertainty of Power Measurement @ 0°C to 50°C	@ -30 to +5 dBm	1 - 3000	-	± 0.25	-	dB
		3000 - 6000	-	± 0.25	-	dB
	@ +5 to +12 dBm	1 - 3000	-	± 0.20	-	dB
		3000 - 6000	-	± 0.20	-	dB
	@ +12 to +20 dBm	1 - 3000	-	± 0.35	-	dB
		3000 - 6000	-	± 0.30	-	dB
Linearity @ 25°C	1 - 6000	-	± 0.10	-	dB	
Measurement Resolution	1 - 6000	0.01	-	-	dB	
Averaging Range	1 - 6000	1	-	999	-	
Measurement Speed	1 - 6000	-	200	-	mSec	

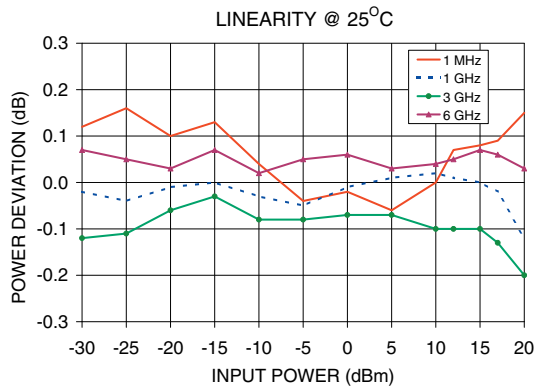
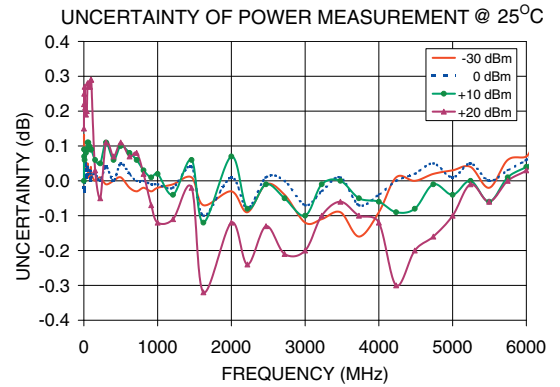
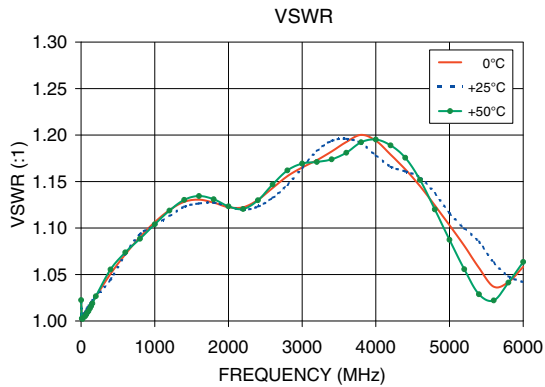
System Requirements

Parameter	Requirements
Interface	USB 1.1 / USB 2.0
Host operating system	Windows 98®, Windows XP®, Windows Vista®
Hardware	Pentium® III or higher, RAM 512 Mb, USB port

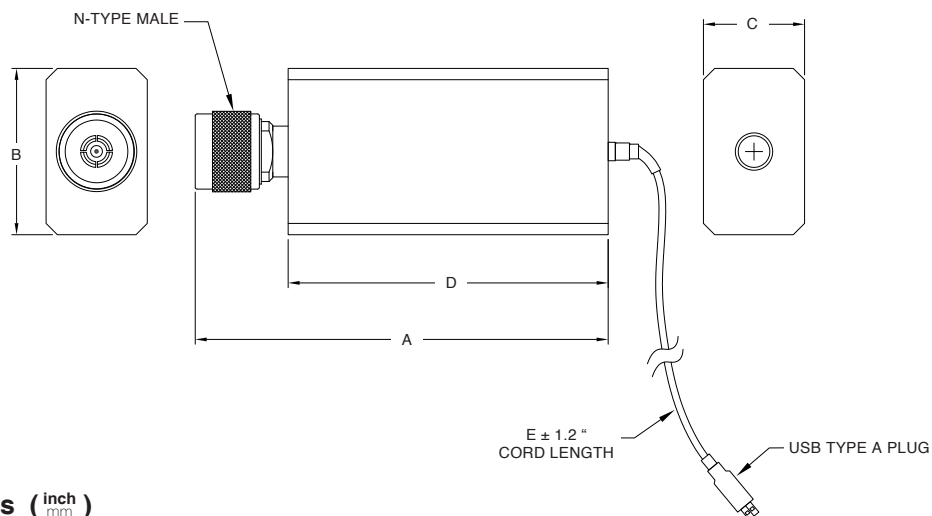
Absolute Maximum Ratings

Parameter	Ratings
Operating Temperature	0°C to 50°C
Storage Temperature	-30°C to 70°C
Current (via host USB)	40 mA (+5V)
DC Voltage at RF port	15V
CW Power	+27 dBm

Typical Performance Curves



Outline Drawing (JL1337)



Outline Dimensions (inch/mm)

A	B	C	D	E	WT. GRAMS
4.31	1.74	1.06	3.34	72.0	230
109.47	44.20	26.92	84.84	1828.8	

Warranty

For a full statement of the limited warranty offered by Mini-Circuits for the PWR-6G+ and the non-exclusive license for the software provided with the PWR-6G+ and the exclusive rights and remedies thereunder, together with Mini-Circuit's limitations of warranties and limitation of liability, please refer to Mini-Circuits User Guide for the PWR-6G+ and Mini-Circuits standard terms of sale found on its standard purchase order acknowledgment form, which are incorporated herein by reference. If you do not have these documents, please contact a Mini-Circuits representative and these documents will be provided promptly. Alternatively, for a copy of Mini-Circuits' standard terms of sale, visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

THE SOFTWARE IS PROVIDED "AS IS", "WITH ALL FAULTS", AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTY OF ANY KIND, ALL OF WHICH ARE HEREBY WAIVED.

Ordering Information

Model Number	Description	Quantity Min. No. of Units	Price \$ Ea.
PWR-6G+	USB Power Sensor with USB cable, NF-SM Adapter & Installation CD	1-4	695.00
PWR-SEN-6G+	Power Sensor Head	1	Included
USB-CBL+	Data cable with USB Type-A plug connector	1	
NF-SM50+	N-Type Female to SMA-Male Adapter	1	
PWR-6GCD	Installation CD	1	
CALSEN-6G	Annual Calibration	1	99.00



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