USB *Smart* Power Sensor PWR-2GHS-75

75Ω -30 dBm to +20 dBm, 100 kHz to 2000 MHz

The Big Deal

- 75Ω Impedance
- Low cost
- USB HID device compatible with 32/64 Bit operating systems
- Includes “Measurement Application” GUI (Graphical User Interface) software with an API-DLL com object
- High speed measurement capability

Installation CD

CASE STYLE: JL1337

30 day MONEY-BACK GUARANTEE! Click Here For More Details

Product Overview

The Mini-Circuits PWR-2GHS-75 Smart Power Sensor is a 75Ω pocket-sized, 4.89” x 1.74” x 0.95”, precision test USB HID device (no driver installation required) that turns a Windows® or Linux® PC into a power meter. All specifications provided in the data sheet apply to continuous wave (CW) signals. Each unit is shipped with our quick-locking USB cable for reliable connectivity. Native software and detailed user guides are provided on the included CD, or can be downloaded from minicircuits.com anywhere an internet connection is available , providing a full range of data analysis options.

Key Features

Feature	Advantages
USB HID (Human Interface Device)	Plug-and-Play (no need to install driver for the device).
GUI Measurement Application Software built-in	Enables the user to perform measurements on RF components such as Couplers, Filters, Amplifiers etc. and displays numerical data and graphs .
32/64 Bit operating systems	Compatible with Windows® and Linux® operating systems.
No calibration required before taking measurement	The PWR-2GHS-75 does not require any reference signal for calibration.

Wide Dynamic Range

USB *Smart* Power Sensor

PWR-2GHS-75

75Ω 100 kHz to 2000 MHz

Product Features

- Wide bandwidth, 100 kHz to 2000 MHz
- 50 dB Dynamic Range, -30 to +20 dBm
- Good VSWR, 1.03:1 typ.
- Fast measurement speed, 30 msec typ.
- Automatic frequency calibration & temperature compensation
- Multi-sensor capability (up to 24)
- Built in Application Measurement Software
- Remote operation via internet
- Effective, easy-to-use Windows® GUI
- Linux® support
- Compatible with 32/64-bit Windows® or Linux® operating systems
- ActiveX com object and .Net class library for use with other software: C++, C#, CVI®, Delphi®, LabVIEW® 8 or newer, MATLAB® 7 or newer, Python, Agilent VEE®, Visual Basic®, Visual Studio® 6 or newer, and more[1]

Installation CD

Case Style: JL1337

Model No.	Description	Price	Qty.
PWR-2GHS-75	**USB *smart* Power Sensor**	$795.00 ea.	(1-4)
Included Accessories			
PWR-SEN-2GHS-75	Power Sensor Head		
USB-CBL+	6 ft data cable (USB TYpe-A Plug)		1
PWR-SEN-CD	Installation CD		1

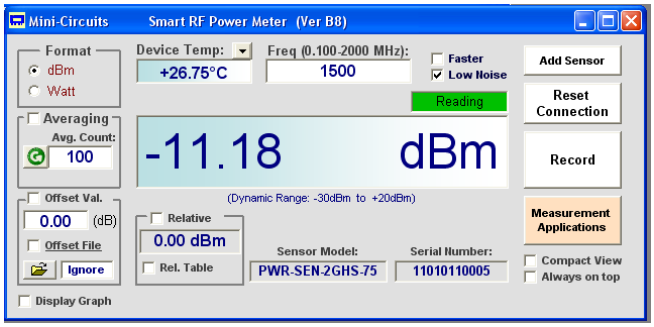
Typical Applications

- Turn almost any Windows or Linux PC into a Power Meter
- Pocket-sized portability for benchtop testing anywhere
- Remote location monitoring
- Automatic, scheduled data collection
- Evaluate high-power, multi-port devices with built-in virtual couplers/attenuators & other software tools

RoHS Compliant

See our web site for RoHS Compliance methodologies and qualifications

Mini-Circuits Power Meter Program for *Smart* USB Power Sensor



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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

Electrical Specifications (CW) [2], -30 dBm to +20 dBm, 100 kHz to 2000 MHz

Parameter		Freq. Range (MHz)	Min.	Typ.	Max.	Units
Dynamic Range		0.1 - 2000	-30	-	+20	dBm
VSWR		0.1 - 2000	-	1.03	1.20	:1
Uncertainty of Power Measurement @ 25°C	@ -30 to +5 dBm	0.1 - 1000	-	± 0.10	± 0.30	dB
		1000 - 2000	-	± 0.05	± 0.30	dB
	@ +5 to +12 dBm	0.1 - 1000	-	± 0.05	± 0.25	dB
		1000 - 2000	-	± 0.05	± 0.20	dB
	@ +12 to +20 dBm	0.1 - 1000	-	± 0.10	± 0.30	dB
		1000 - 2000	-	± 0.15	± 0.40	dB
Uncertainty of Power Measurement @ 0°C to 50°C	@ -30 to +5 dBm	0.1 - 1000	-	± 0.10	-	dB
		1000 - 2000	-	± 0.10	-	dB
	@ +5 to +12 dBm	0.1 - 1000	-	± 0.10	-	dB
		1000 - 2000	-	± 0.10	-	dB
	@ +12 to +20 dBm	0.1 - 1000	-	± 0.10	-	dB
		1000 - 2000	-	± 0.15	-	dB
Linearity @ 25°C		0.1 - 2000	-	± 2.3	-	%
Measurement Resolution		0.1 - 2000	0.01	-	-	dB
Averaging Range		0.1 - 2000	1	-	999	-
Measurement Speed	@ Low Noise Mode	0.1 - 2000	-	100	-	mSec
	@ Faster Mode		-	30	-	
Current (via host USB)		0.1 - 2000	-	40	70	mA

Minimum System Requirements

Parameter	Requirements
Interface	USB HID
Host operating system	32 Bit operating system: Windows 98®, Windows XP®, Windows Vista®, Windows 7® 64 Bit operating system: Windows Vista ®, Windows 7 ® Linux ® support: 32/64 Bit operating system
Hardware	Pentium® II or higher, RAM 256 Mb, USB port
USB cable (supplied)	Power sensor to be used with the supplied USB cable only

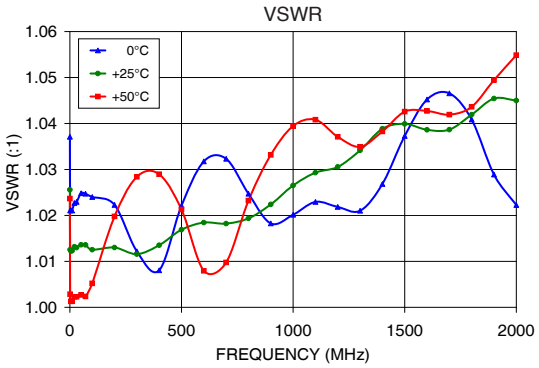
Note 2: All specifications apply to continuous wave (CW) signals.

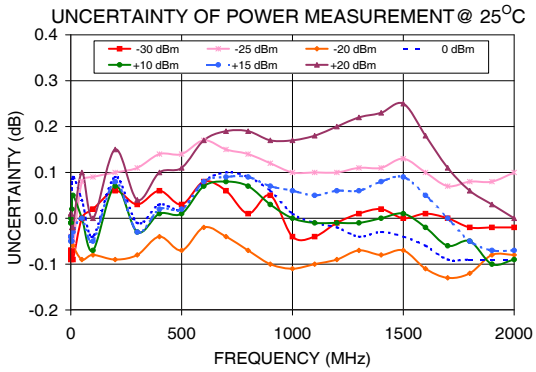
Absolute Maximum Ratings

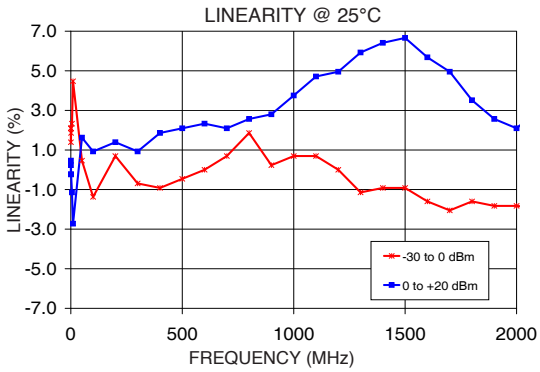
Parameter	Ratings
Operating Temperature	0°C to 50°C
Storage Temperature	-30°C to 70°C
DC Voltage at RF port	4V
CW Power	+25dBm

Permanent damage may occur if any of these limits are exceeded.

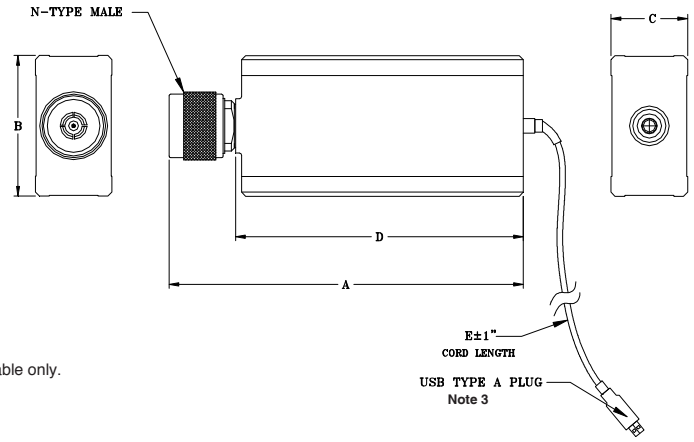
Typical Performance Curves







Outline Drawing (JL1337)



Note 3: Power sensor to be used with the supplied USB cable only.

Outline Dimensions (inch / mm)

A	B	C	D	E	WT. GRAMS
4.39 111.5	**1.74** 44.2	**0.95** 24.1	**3.50** 88.9	**72.0** 1829	200

Warranty

For a full statement of the limited warranty offered by Mini-Circuits for the PWR-2GHS-75 and the non-exclusive license for the software provided with the PWR-2GHS-75 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-2GHS-75 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.

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Ordering, Pricing & Availability Information see our web site

Model	Description
PWR-2GHS-75	USB *Smart* Power Sensor

Included Accessories	Description
PWR-SEN-2GHS-75	Power Sensor Head
USB-CBL+[4]	6 ft data cable with USB Type-A plug connector
PWR-SEN-CD	Installation CD

Note 4: Power sensor to be used with the supplied USB cable only.

Calibration

Model	Description	
CALSEN-2GHS-75	Calibration Service	Click Here

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