



Agilent

Z2090B-200 Series Calibration Systems

for Spectrum Analyzers, RF Sources,
RF Power Meters and Power Sensors

System Overview

Getting your equipment repaired and calibrated by Agilent is one way to ensure that it maintains its high level of measurement integrity throughout its lifetime. For self-maintainers however, it is necessary to obtain repair and calibration capability in-house. Agilent is committed to supporting the needs of the self-maintainer. We offer our customers the same software solutions that our Factory authorizes for use in our own service centers. With these solutions, our customers can be confident that their instruments are proving "like new" performance, with maximum precision and utilization of the equipment. Now Agilent offers the Z2090B-200 family of systems to complement our N7800A calibration software. These systems provide a complete, turn-key solution to support the needs of self-maintainers.

The Z2090B-200 is available in a variety of configurations. These systems provide all of the necessary instrumentation, test accessories and software to perform automated calibration and adjustment procedures for Spectrum Analyzers, RF Sources, RF Power Meters and Power Sensors. Configuration options are available to match specific test coverage needs. For complete verification of all instrument specifications, this often includes system options for Phase



Noise and Power Sensor Linearity performance verification testing.

The system uses our standard N7800A Test Management Environment Software (TME). This software package includes automated calibration and adjustment applications for over 100 Agilent RF and microwave products. A standard set of Agilent instrumentation is utilized by these N7800A applications making optimal use of a common set of test assets for a wide variety of calibration procedures.

Standards-Based Calibration

Traceability to standards is important to our Aerospace and Defense customers. The Z2090B-200 meets this need, offering proven methods for instrument calibration, guaranteed by Agilent, and in compliance with standards such as Z540 and ISO17025. Measurement uncertainties are calculated based on actual measured results and are included with the calibration data.



Agilent Technologies

Z2090B-200 Calibration System Features	Agilent Standard-based calibration method
Provide a turn-key solution with all necessary hardware and software to perform automated spectrum analyzer calibration	✓
Fully meets audit requirements, traceable to national and international standards	✓
Complete instruments functionality tested and 100% of our factory-specified measurement points checked using Agilent approved calibration methods	✓
Includes automated instrument adjustment procedures used if unit is found out of tolerance	✓
Full performance data showing calibration results	✓
Certificate of calibration showing instrument status	✓
Measurement uncertainties provided with calibration data	✓
Can select full conformance to Z540, ISO 17025, or local Accreditation requirements	✓

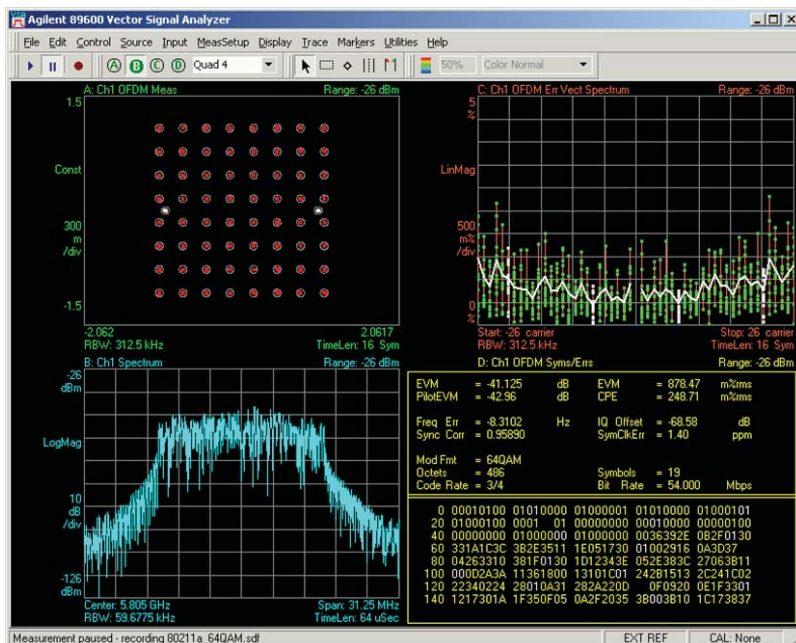
Each system in the Z2090B-200 family includes a PC, system rack, and all the necessary instruments, cables and test accessories. The system is integrated and tested, offering a turn-key solution for the customer. Installation and Operator training services are also available.

To provide the highest level of confidence that the instrument being tested conforms to published, factory-set specifications, an extensive suite of tests are performed (for more details see the N7800A TME software application and support page at: www.calsw.tm.agilent.com).

Configurations

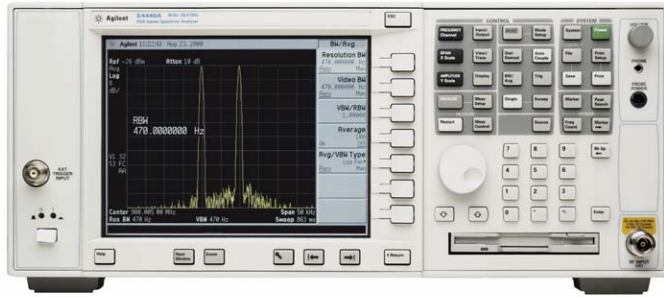
As with any system ordered from Agilent, all the necessary project management, procurement, system integration and test services are included. These services combined with the specified hardware and software components provide a turn-key solution for performing instrument calibration. The Z2090B-200 series calibration systems can be ordered in several standard configurations. In addition Agilent can configure a system to meet your exact needs. Standard system options include test coverage for:

- 26.5 and 50 GHz spectrum analyzers
- 20, 40 and 50 GHz RF sources (scalar and vector)
- RF power sensors (9 kHz to 50 GHz)
- 26.5 and 50 GHz phase noise measurements for sources
- Pulse modulation measurements
- Spectrum analyzer audio input calibration
- 26.5 and 50 GHz power sensor mismatch and Cal factor
- Power sensor linearity
- 9 kHz low-band option for power sensors
- Options to combine features in a single system



Supported Instruments

Spectrum Analyzers



Z2090B System Options 210 and 211

- E444xA PSA series
- N8201A synthetic instrument downconverters
- N9010A EXA, N9020A MXA series
- E440xA, E4411A, E740xA ESA series (tracking generator options 1DN and 1DQ can be supported as well, please consult with our local sales professional cost)

RF Sources



Z2090B System Options 215 and 216

- PSG series microwave sources
- ESG series RF sources
- N518xA MXG series sources
- N821xA synthetic instrument upconverters

RF Power Sensors



Z2090B System Options 207 and 212

- U200xA USB power sensors
- N8400 series (Spring '09)
- N5532A series MMR sensors
- 8481A
- 8482A
- 8485A
- 8485D
- 8487A
- E9304A

Additionally Agilent can provide assistance in calibrating other HP and Agilent power sensor models, please check with your local Agilent sales professional.

For more information go to our website www.agilent.com/find/ad-systems and navigate to the calibration system pages.



Agilent Email Updates

www.agilent.com/find/emailupdates

Get the latest information on the products and applications you select.



www.lxistandard.org

LXI is the LAN-based successor to GPIB, providing faster, more efficient connectivity. Agilent is a founding member of the LXI consortium.

Agilent Channel Partners

www.agilent.com/find/channelpartners

Get the best of both worlds: Agilent's measurement expertise and product breadth, combined with channel partner convenience.

Windows is a U.S. registered trademark of Microsoft Corporation.

Remove all doubt

Our repair and calibration services will get your equipment back to you, performing like new, when promised. You will get full value out of your Agilent equipment throughout its lifetime. Your equipment will be serviced by Agilent-trained technicians using the latest factory calibration procedures, automated repair diagnostics and genuine parts. You will always have the utmost confidence in your measurements. For information regarding self maintenance of this product, please contact your Agilent office.

Agilent offers a wide range of additional expert test and measurement services for your equipment, including initial start-up assistance, onsite education and training, as well as design, system integration, and project management.

For more information on repair and calibration services, go to:

www.agilent.com/find/removealldoubt

www.agilent.com
www.agilent.com/find/assist

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus

Americas

Canada	(877) 894 4414
Latin America	305 269 7500
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Thailand	1 800 226 008

Europe & Middle East

Austria	43 (0) 1 360 277 1571
Belgium	32 (0) 2 404 93 40
Denmark	45 70 13 15 15
Finland	358 (0) 10 855 2100
France	0825 010 700*
	*0.125 €/minute
Germany	49 (0) 7031 464 6333
Ireland	1890 924 204
Israel	972-3-9288-504/544
Italy	39 02 92 60 8484
Netherlands	31 (0) 20 547 2111
Spain	34 (91) 631 3300
Sweden	0200-88 22 55
Switzerland	0800 80 53 53
United Kingdom	44 (0) 118 9276201

Other European Countries:

www.agilent.com/find/contactus

Revised: October 1, 2009

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2009
Printed in USA, October 24, 2009
5989-6810ENUS



Agilent Technologies