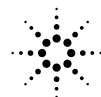
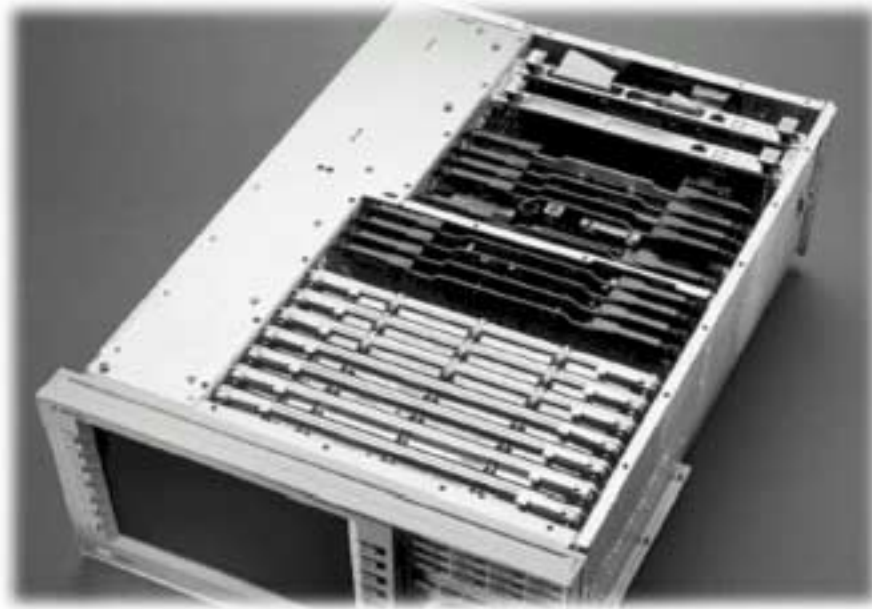


Installation Note

**Agilent Technologies 8960 Wireless Communication Test Set
Add Extended Frequency Capability to the E5515C
Kit Part Number: E5515CU-509**



Agilent Technologies

Notice:

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**Agilent Technologies 8960 Wireless Communication Test Set
 Add Extended Frequency Capability to the E5515C
 Kit Part Number: E5515CU-509**

Products Affected:	E5515C
Serial Numbers:	E5515C <GB45200000
Options Required:	N/A
Applications Supported:	All
To Be Performed By:	(X) Agilent Technologies Service Center (X) Personnel Qualified by Agilent Technologies () Customer
Estimated Installation Time:	2.0 hours
Estimated Verification Time:	0.5 hours

Introduction

NOTE:

Installation includes the following major steps:

1. Upgrade Existing Applications.
2. Remove Non-compatible Applications
3. Disassembly
 - a. Remove the instrument covers.
 - b. Remove the old boards.
4. Assembly
 - a. Replace ADC Samplers.
 - b. Install new Boards.
 - c. Install Option Label
5. Replace covers.

Installation Kit Parts List

Item	Qty	Description
1	1	Label
2	1	RF Interface Assy
3	1	Installation Instructions (this document)

- Label should have **509** printed on it.

Tools Required

- TORX T-15 and T-20 drivers
- PC with LAN capabilities

Safety Considerations

WARNING Before you disassemble the test set, turn the power switch off and unplug the power cord. Failure to unplug the test set can result in personal injury.

CAUTION Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation.

Install New and Upgrade Existing Applications:

1. Upgrade all existing Applications to the latest revision if not compatible (see Table 1) and switch to one of the new revisions. All non-compatible Applications must be upgraded to work with the new boards that are included in this upgrade kit.
2. Follow the Firmware installation instructions that come with the Applications.

E1960A	GSM	NOT SUPPORTED
E1961A	AMPS/136	A.09.xx or greater
E1962B	CDMA 2000 TA	B.08.xx or greater
E1963A	W-CDMA TA	A.06.xx or greater
E1964A	GPRS TA	NOT SUPPORTED
E1966A	1xEV-DO TA	A.03.xx or greater
E1968A	GSM/GPRS/EGPRS TA	A.04.xx or greater
E1985A	GSM/GPRS_AMPS/136_W-CDMA	NOT SUPPORTED
E1985B	GSM/GPRS_AMPS/136_W-CDMA	B.05.xx or greater
E1985C	GSM/GPRS_CDMA2000_AMPS/136	C.03.xx or greater
E1985E	CDMA2000_1xEV-DO	E.02.xx or greater
E6590A	GSM/GPRS RF Modem	A.02.xx or greater
E6701A	GPRS LA	NOT SUPPORTED
E6701B	GSM/GPRS LA	NOT SUPPORTED
E6701C	GSM/GPRS LA	C.04.xx or greater
E6702A	CDMA 2000 LA	NOT SUPPORTED
E6703A	W-CDMA LA	NOT SUPPORTED
E6703B	W-CDMA LA	B.02.xx or greater
E6785A	GSM/GPRS_W-CDMA LA	NOT SUPPORTED
E6785B	GSM/GPRS_W-CDMA LA	B.02.xx or greater

Table 1

If an application is not in Table 1 then it is already compatible with the upgraded hardware.

Remove Non-compatible Applications:

1. Remove all non-compatible Applications from the test set. Removing older Application revisions prevents improper operation of the test set. The test set must be connected to the PC LAN port to use these tools, see Table 1 for compatibility.
 - a. Run the Agilent 8960 File Utility
 - b. Select the Direct Connection (Single test set) button.
 - c. Select the Test Application tab.
 - d. Highlight the old revision(s) of Application(s) and select the Delete From test set button. Do not delete the new and updated applications just loaded.

Disassembly:

Remove outer cover and top cover for the 8960

1. Remove handles and rear bumpers.
2. Remove the screws on the rear panel holding outer cover.
3. Slide outer cover off.
4. Remove the 26 screws holding the top cover on and remove the cover.

Remove the old boards

1. On the bottom, remove the old RF Interface module. Refer to the *Replaceable Parts List (E5515A/B/C/T)* in the *Troubleshooting and Repair* section of the 8960 Assembly Level Repair area at: www.agilent.com/find/8960toolbox for board location.

Assembly:

Install New RF Interface Module

1. Install the RF Interface as per diagram on page 15 of the Replaceable Parts List document, referred to above.

Install Option Label

1. Install the option label, 7121-7884, on the back of the instrument.
 - a. Write 509 on the label if blank.
 - b. Don't cover up the old option label if the options on the old label are not also on the new label.

NOTE: If the test set does not power up because of an inoperative processor, replace the processor first; and then use the Agilent 8960 File Utility to re-install the Test Application. Select the TEST SET RECOVERY function on the bottom of the OPTIONS screen. Follow the instructions on the screen.

Replace covers:

1. Replace the top cover and secure it with the 26 screws.
2. Slide the outer cover on.
3. Replace the outer cover screws on the rear panel.
4. Attach the rear bumpers and handles.

Adjust and Test and after Upgrade:

1. Turn on the test set and warm up for 30 minutes.
2. Perform the IQ Calibration for SOURCE 1 & 2
3. Perform the Burst Mod Offset 1 Calibration
4. Perform the Digital Average Power calibration
5. Cycle the power on the instrument
6. Perform the Spectrum Monitor Calibration
7. Run the software “RF PATH MAINTENANCE” to check and create related calibration files on Hard Disk.
8. Install the RF Path Maintenance found at; www.agilent.com/find/8960toolbox.
9. Run the Test Set Verify software www.agilent.com/find/8960toolbox to verify the test set after the upgrade. Test Set Verify software.

Questions and concerns: contact Agilent Technologies Support:

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