



## Agilent E5515C Wireless Communications Test Set

High performance hardware platform for the 8960 family of mobile device design and manufacturing test solutions

**Technical Overview** 



The only bench top test set hardware platform with performance for mobile device test across the entire lifecycle – from design through integration/validation, conformance, manufacturing and repair.



The high performance E5515C is the hardware platform for the 8960 wireless communications test set family. Combining the E5515C with software from the 8960 family of embedded software applications creates a cellular network emulator for testing mobile device RF, baseband and IP data traffic flows. Testing can be done via call processing or test mode control and provides:

- Industry's most accurate, repeatable standards-compliant RF and baseband measurements
- Stable performance for end-to-end high speed IP data throughput testing
- Industry leading accuracy, reliability and measurement speed

The 8960 with E5515C speeds mobile device development, increases manufacturing throughput and minimizes support costs.

Test performance specifications are documented in the software applications. Refer to www.agilent.com/find/8960 for available software applications.

# One test set for design, integration/validation, conformance, and manufacturing test

Using one test set across the design cycle speeds design and manufacturing by providing faster and simpler debug and fix cycles, easier problem replication across groups, higher asset utilization, and reduced support requirements.

The 8960 hardware platform consists of the E5515C base-model and three hardware functionality options:

- Option 002 Second RF source for GSM, GPRS and EGPRS technologies.
- Option 003 Flexible CDMA base station emulator for today's CDMA-based technologies such as cdma2000, 1xEV-DO, W-CDMA, HSPA and HSPA+. Also needed for some GSM, GPRS and EGPRS features.
- Option 004 Digital Bus option for fading test solutions with Agilent's N5115/5101 Baseband Studio applications

### **Technical Specifications**

These specifications apply to an E5515C mainframe for serial number US40410101, GB4041010, MY46010000 or higher.

Specifications describe the test set's warranted performance and are valid for the unit's operation within the stated environmental range unless otherwise noted. All specifications are valid after a 30-minute warm-up period of continuous operation.

Supplemental characteristics are intended to provide typical, but non-warranted, performance parameters that may be useful in applying the instrument. These characteristics are shown in italics and labeled as "typical", or "supplemental." All units shipped from the factory meet these typical numbers at 25 °C ambient temperature without including measurement uncertainty.

These are general specifications that apply to an E5515C mainframe over the 25 °C  $\pm$ 5 °C ambient temperature range. Specific test and lab application specifications can be found in the library on the 8960 website: www.agilent.com/find/8960

Remote programming	
GPIB	IEEE Standard 488.2
GPIB help	pressing the front panel Help key and then any other key will cause the test set to display the GPIB syntax for that command at the bottom of the front panel display; pressing the Help key again exits this mode of operation
Remote front panel lockout	allows remote user to disable the front panel display to improve GPIB measurement speed
Implemented functions	T6, TE0, L4, LE0, SH1, AH1, RL1, SR1, PP0, DC1, DT0, C0, and E2

General specifications		
Dimensions (H x W x D)	8.75 x 16.75 x 24.63 inches (222 x 426 x 625 mm), 7	
	rack spaces high	
Weight	66 lbs (30 kg)	
Display	10.5 inches (26.7 cm), active matrix, color, liquid crysta	
LAN (local area network) port	RJ-45 connector, 10 base T Ethernet with TCP/IP	
(for firmware upgrades and	support	
protocol logging only)		
Operating temperature	0 to +55 °C	
Storage temperature	-20 to +70 °C	
Power	100 to 240 Vac, 50 to 60 Hz, 550 VA maximum	
Calibration interval	two years	
EMI	conducted and radiated interference meets CISPR-11	
Radiated leakage due to RF	typically < 1 $\mu$ V induced in a resonant dipole antenna	
generator	one inch from any surface except the underside and	
	rear panel at set RF generator output frequency and output level of –40 dBm	
Spurious leakage	typically < 5 $\mu$ V induced in a resonant dipole antenna	
	one inch from any surface on the front half of all sides	
	of the instrument at frequencies other than the RF	
	generator output frequency and output level of –40	
	dBm with no cable connected to the rear-panel LAN	
	port	
Power consumption	typically 400 to 450 W continuous	



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