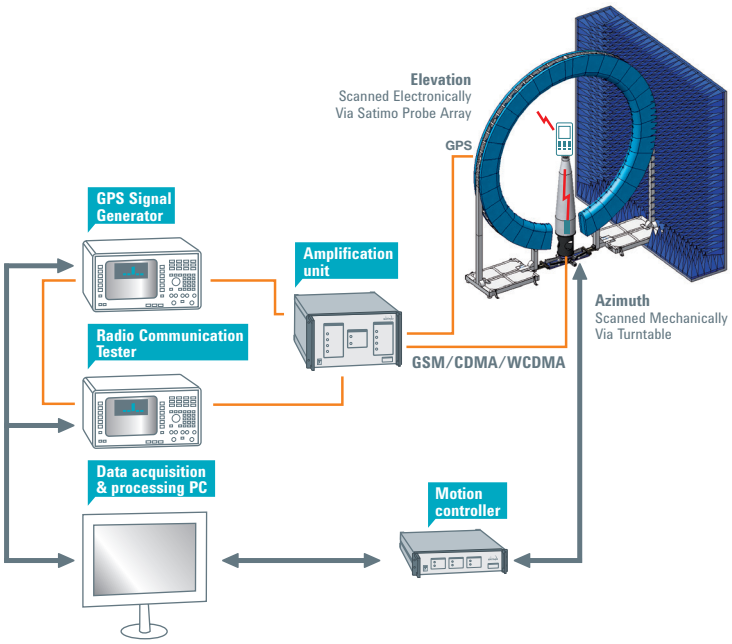
A-GPS OTA Measurements

Keysight Technologies and Microwave Vision Group

Achieve CTIA certification with improved accuracy and repeatability in your A-GPS Over-the-Air measurements



- GPS OTA antenna measurements for CTIA certification
- Meets CTIA certification standards for wireless devices
- Multi-probe array gives reduced mechanical movements
- Used with Keysight 8960 wireless communications test set
- MVG software wizard for CTIA certification measurements
- Improved accuracy and repeatability of CTIA certification testing

Assisted GPS OTA (over-the-air) measurements are integral to the CTIA certification process for wireless devices. To ensure the compliance of your wireless devices requires that you undertake comprehensive A-GPS OTA antenna measurements that meet the demands of the CTIA certification standards.

The Microwave Vision Group has applied its multi-probe antenna measurement technology to A-GPS OTA wireless device characterization. When used in conjunction an anechoic chamber and Keysight instrumentation the system is compliant with the standards specified for CTIA certification of wireless devices. The system allows you to test your UMTS, GSM, CDMA and WCDMA wireless devices to the CTIA certification standards with improved repeatability and accuracy.

KEYSIGHT TECHNOLOGIES

A-GPS OTA Measurements

Multi-probe measurements minimize the mechanical movements required to test a device-under-test (DUT). In most spherical single probe antenna measurement systems the DUT is rotated in azimuth from 0° to 360° and in elevation from 0° to 180°. By utilizing a circular arch of electronically scanned probes, MVG can reduce the mechanical movements to just 180° of rotation. The result is improved measurement accuracy and repeatability.

The MVG A-GPS OTA antenna measurement system includes the Keysight 8960 wireless communications test set and an E4438C ESG vector signal generator with GPS personality. The system incorporates software from MVG that facilitates the measurement process by simplifying the user interface and providing a software wizard for the measurements required for CTIA certification.

The system allows you to perform a comprehensive set of measurements consistent with the CTIA certification standards. These include characterization of antenna radiation pattern (C/N), linearization, sensitivity (peak, TIS, UHIS, and PIGS), as well as intermediate channel degradation (ICD). These tests ensure that interference from cellular communication across the band does not degrade the GPS performance of the wireless device

MVG's multi-probe antenna measurement technology, when used with Keysight instrumentation, give you the accuracy and repeatability necessary to ensure that your wireless devices meet the CTIA certification standards for A-GPS OTA performance.

System Components

Keysight Technologies

E5515C	8960 Series 10 wireless communications test set
E4438C	ESG vector signal generator
E4438C-409	GPS personality

MVG

OTA10-GSM	A-GPS OTA test system for GSM protocols
OTA10-CDMA	A-GPS OTA test system for CDMA protocols
OTA10-WCDMA	A-GPS OTA test system for WCDMA protocols

Note: Multiple protocols may be specified

To learn how this solution can address your specific needs please contact Keysight's solutions partner, Microwave Vision Group
www.keysight.com/find/mvg

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MVG, the Microwave Vision Group (SATIMO, ORBIT/FR, & AEMI) designs, manufactures & installs antenna test & measurement systems.
www.microwavevision.com

For information on Keysight Technologies' products, applications and services, go to
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