CTIA Battery Life Test

Keysight Technologies and W2BI, Inc.

Ensure your mobile and smart devices comply with the CTIA Battery Life Test Plan

A new standard developed by the CTIA Working Group supported by leading wireless carriers, OEMs, test equipment manufacturers, and test software vendors specifies controlled network and device conditions for user equipment (UE) battery performance characterization. The goal is to test battery performance based on a set of realistic scenarios that represent a typical user's every day activitie

In order to comply with the new standard, mobile and smart devices must undergo a range of testing scenarios. Keysight Technologies and W2BI, Inc. provide a fully auto-mated system to ensure compliance to the CTIA Battery Life Test Plan.

The QUIKPROBE™ GLOBAL (QPG-1000) Series Test System combines emulator and power analyzer hardware from Keysight with test automation software from W2BI. The QPG-1000 supports multiple technologies. It uses The Keysight E7515A (UXM) for LTE and WCDMA technologies and the Keysight E5515C/E (8960) Wireless Test Set for 2G/3G technologies. The QPG-1000 Test System also uses the Keysight N6705B Power Analyzer with N6781A Power Module. Customers with existing E5515C/E hardware may re-use their existing equipment when it meets the hardware and application requirements.

The QPG-1000 Test System runs on W2BI's test automation platform with pre-packaged test scripts complying with the CTIA Battery Life Test Plan. The emulator and power analyzer are fully automated during test case execution. Users can test across a wide range of LTE and legacy technology bands.

The test system provides comprehensive logging and reporting capabilities with a range of reporting formats. Optional customizable reporting capabilities are also available as add-on options. The control of the user equipment is semi-automated with user-friendly and step-by-step guided instructions .
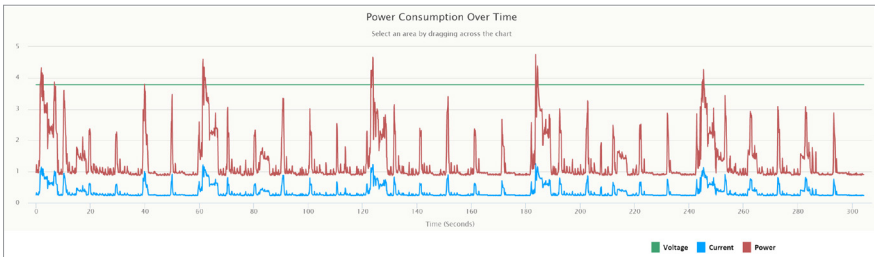
For reduced testing times and better equipment utilization The QPG-1000 Test System allows splitting the setups based on wireless technologies. Data-related test cases can be executed using the UXM setup, Voice/SMS test cases can be executed using the 8960.

– Test multiple formats: LTE, LTE-A, W-CDMA, GSM, CDMA, EVDO* (rev 0, rev A, EHRPD)

– Industry leading Power Analyzer

– Easy to use test automation software

– Fully automated emulator control

– Extensive multi-level reporting

– Optional UE automation for Android

– Optional SmartBox UE automation

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The QPG-1000 Test System provides a simple and easy-to-use user interface. The operator has complete program and configuration control from the various tabs on the user interface. Settings are very intuitive and categorized into logical sections. Users create multiple settings files depending on the test UE. The settings files are re-used for repetitive execution and edited for new models. By default, the system is configured to run the CTIA Battery Life Test Plan settings

The QPG-1000 Test System provides comprehensive logging and reporting capabilities. Multiple reports are available for battery life test results evaluation. The user has access to summary HTML, detailed HTML with advanced and embedded charts, debug logs, consolidated Excel report, and Power Analyzer logs. The reports enable comparisons across different versions of device firmware, models, or applications.

The test system is designed as a self-contained test system that does not require additional components from the Internet. All the servers and audio/video files necessary to execute the tests are available in the local system setup. Results are repeatable and comparable, whether comparing different UE's or different software revisions. The system evaluates UE performance with known network conditions.

With the QPG-1000 from Keysight and W2BI you can perform the comprehensive tests required to ensure that your mobile and smart devices comply with the CTIA Battery Life Test Plan.

System Components

Keysight Technologies

E7515A	Wireless Test Set: Single Cell LTE Emulator; Dual cell option for CA; Built in IMS Server for VOLTE
N6705B	Power Analyzer
N6781A	Power Module

W2BI, Inc.

QPG-1010 (LTE)	CTIA Battery Life Test Plan; LTE Test Scripts; QuikProbe Global Platform; Controller PC Package
3GPP Add-on	GSM/WCDMA Test scripts
3GPP2 Add-on	1xRTT Test Scripts

Keysight and its Solutions Partners work together to help customers meet their unique challenges, in design, manufacturing, installation or support. To learn more about the program, our partners and solutions go to
www.keysight.com/find/solutionspartner

W2BI is a leading provider of automated test and measurement software for advanced mobile devices for wireless device operators, suppliers and laboratories.
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