

CTIA Battery Life Testing

The purpose of the CTIA Battery Life Certification Program is to provide an estimate of the expected battery life of smartphones or smartwatches under a standardized usage and environmental profiles.

Test Plan version 1.6 has also introduced MIoT testing and this has been fully implemented and delivered to registered CTIA Approved Labs.

Analytek, in partnership with Rohde & Schwarz, are the only suppliers of the CTIA Authorised Battery Life Test System.

CTIA Authorised Platform for Battery Life Testing

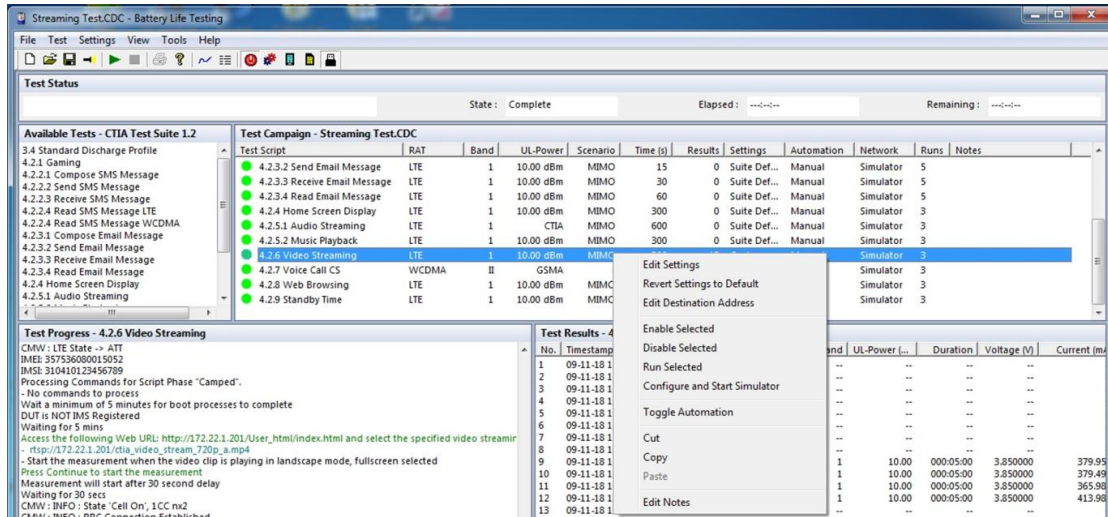


Analytek Software Features

- o Easy to use Windows application
- o Test Suite supplied with CTIA Test Plan specified Test Scripts.
- o Default Template provided to generate new Test Campaigns with all required Tests and their specified settings.
- o Scripted scenarios allow customisation for analysis.
- o Result output provided in TXT, CSV and HTML report formats.
- o Verdict Generation based on CTIA Test Plan requirements
- o Runtime graphic and result presentation.
- o Software provides complete control of the Network Simulator, GNSS Simulator and Power Analyser at runtime.
- o Archive and export features for offline analysis.
- o Software option to add CTIA MIoT Test Suite available.
- o Test Suites available for other Operator, GSMA and GCF Standards.

Analytek Battery Life Measurement – CTIA Test Plan

Current Drain Measurement Software



CTIA Specified Hardware and Software Requirements

Manufacturer	Model	Minimum Qty	SW Version	Script Version	Notes / Required options
Analytek Limited	ANALYTEK BATTERY LIFE SW	1	Framework 3.76 Build 750 or later	Test Suite 1.6 or later	ANA-TSB-CTIA is required for new installations. When adding to existing licensed Test Suite(s), only ANA-TS-CTIA-BLTP is required (ANA-OPT-AUX-PSU is a pre-requisite). Option for GNSS Simulator handling.
	ANA-TS-CTIA-MIOT			TS 1.6	Test Suite for MIoT tests as per TP 1.6
Rohde & Schwarz	BASE HARDWARE				Specific options required in addition to any existing options fitted
	CMW500	1	3.7.120 and later		Wideband Radio Communication Tester
	CMW-B590A or B590D	2			RF Frontend, basic (B590A *2), or advanced (B590D *1) required
	CMW-B570B	2			RF Converter (TRX) - 2 required
	CMW-B612A or B612B	1			IEEE Bus Interface, single interface
	LTE FDD HW & SW				Specific options required in addition to any existing options installed
	CMW-B300 or B500	1			Signaling Unit for WCDMA / LTE
	CMW-KS500	1	3.7.60 and later 3.7.31 for B300		LTE FDD Release 8, SISO, signaling/network emulation, basic functionality
	CMW-KS510	1	3.7.60 and later 3.7.31 for B300		LTE FDD Release 8, SISO, signaling/network emulation, advanced functionality
	CMW-KS520	1	3.7.60 and later 3.7.31 for B300		LTE FDD MIMO 2x2, signaling/network emulation, generic feature
	CAT-M and NB-IoT SW				Specific options required in addition to any existing options installed
	CMW-B500	1			Signaling Unit for NB-IoT (B300 not supported)
	CMW-KS300	1	3.7.80 or later		NB-IoT R13/14, generic signaling
	CMW-KS590	1	3.7.80 or later		LTE MTC, generic signaling
	WCDMA				Specific options required in addition to any existing options installed
	CMW-KS400	1	3.7.22 and later		WCDMA Release 99, signaling/network emulation, basic functionality
CMW-KS410	1	3.7.22 and later		WCDMA Release 99, signaling/network emulation, advanced functionality	
APPLICATION TESTING HW & SW				Specific options required in addition to any existing options fitted and installed	
CMW-B450	1			Data Application Unit	
CMW-KA100, KA150, KAA20 and CMW-KM050	1	3.7.41 and later		Application Testing (CMW-PK45 includes these options and is recommended, but not mandatory)	
Keysight	KEYSIGHT ANALYSER	1	FW D.02.08 or later		DC Power Analyser mainframe or Modular Power System (MPS) mainframe
	N6705B or N6705C or N6700 mainframe				Measure Unit for Battery Drain Analysis
	N6781A or N6785A				
RaceLogic	LabSat 3 GNSS Simulator	1			Minimum configuration: Single constellation Replay Only

Extract from CTIA document [CTIA-Certification-Authorized-Battery-Life-Test-System-Ver_4.6](#)

Ordering Information – Analytek software

Part Number	Name	Description
ANA-TSB-CTIA	CTIA Test Suite Bundle	Test Suite for Smartphone and Smartwatch testing
ANA-OPT-GNSS-01	GNSS Simulator driver	Control API for testing with LabSat 3 GNSS Simulator