

## T-Mobile Battery Performance 5GNR Test Software

The T-Mobile Battery Life TRD document provides details of the Network Configuration setup and the measurement requirements for devices destined for their Network.

Analytek provides the following solution, in partnership with Rohde & Schwarz, with all tests implemented utilising a control PC, Network Simulator and Power Analyser. This Test Suite contains the 5GNR SA and NSA tests.

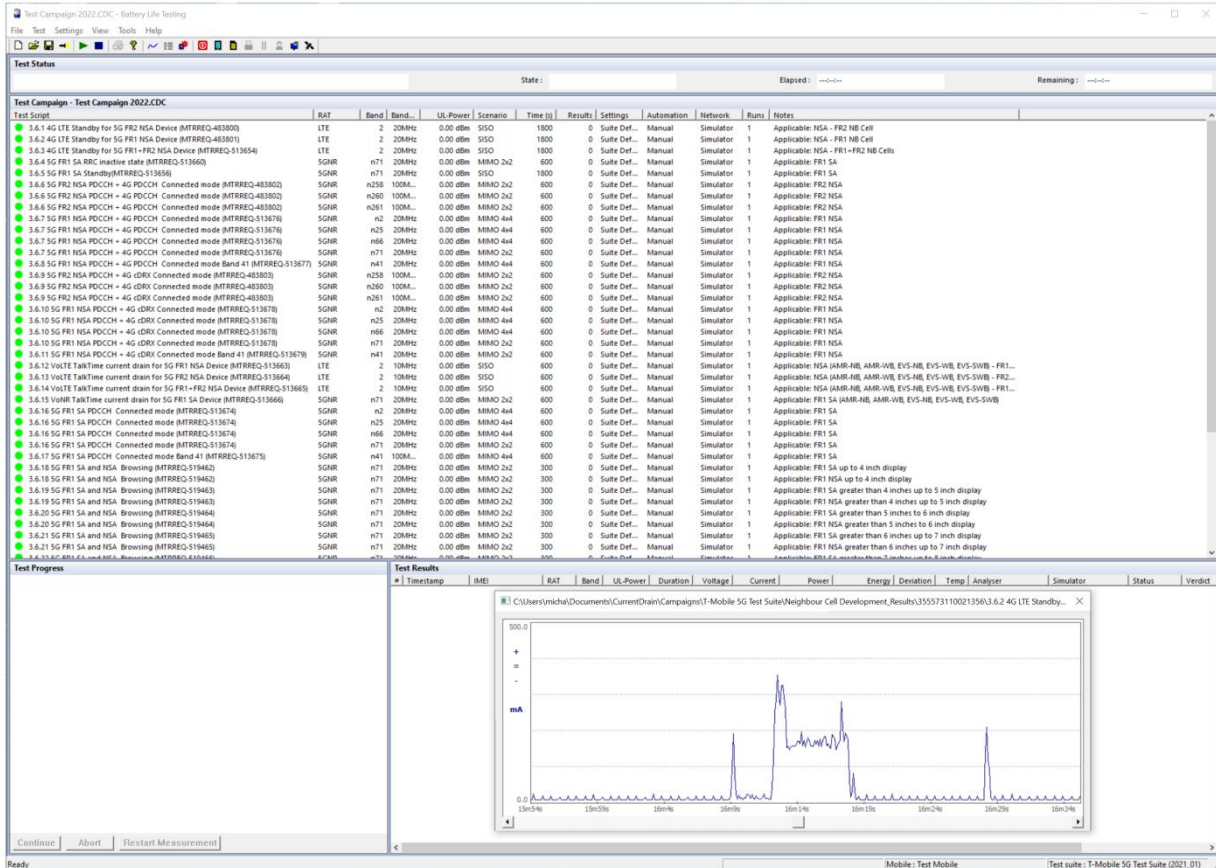
### Hardware for T-Mobile 5GNR Battery Life Testing



### Analytek Software Features

- o Easy to use Windows application.
- o Test Suite supplied with the T-Mobile specified 5GNR NSA and SA 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 T-Mobile specifications.
- o Runtime graphic and result presentation.
- o Software provides complete control of the Network Simulator and Power Analyser at runtime.
- o Archive and export features for offline analysis
- o Test Suite option for T-Mobile's LTE Test Scripts available to run on the CMW500.
- o Test Suites available for other Operator and GSMA, GCF and CTIA Standards.

# Analytek Battery Life Measurement Current Drain Measurement Software



## Equipment Requirements

- R&S® CMX500 Radio Communication Tester
  - o Radio Communication Tester CMX500
  - o CMX500 Basic Assembly CMX-PB70H
  - o Accelerator Unit (3x) CMX-B200A
  - o Processing Unit CMX-B300B
  - o Application Test Feature Set 1 CMX-KA100
  - o NR Signalling, NSA Mode Enabler Basic Level CMX-KS600B
  - o NR Signalling, NSA Mode Enabler Medium Level CMX-KS600M
  - o NR Signalling, SA Mode Enabler Basic Level CMX-KS601B
  - o NR Signaling, SA Mode Enabler Medium Level CMX-KS601M
- o R&S® NGM201 Power Analyser with B301 option (other Power Analysers supported).
- o PC or Laptop
  - o Windows Win7, Win10/11
  - o National Instruments GPIB card and/or R&S/NI VISA

\*Requires a 5G Ready R&S® CMW500 Radio Communication Tester  
 \*Configuration variations should be discussed with Rohde & Schwarz

## Ordering Information

Part Number	Name	Description
ANA-TS-TMO-5G	T-Mobile 5G NR Battery Life	T-Mobile 5G NR Test Suite

T-Mobile Master Terminal 5G NR Requirements List

Heading	Test Name	GID Number
<b>3.6</b>	<b>5G Current Drain</b>	<b>GID-FLD-483799</b>
3.6.1	4G LTE standby current drain for 5G FR2 NSA capable device	GID-MTRREQ-483800
3.6.2	4G LTE standby current drain for 5G FR1 NSA capable device	GID-MTRREQ-483801
3.6.3	4G LTE standby current drain for 5G FR1+ FR2 NSA capable device	GID-MTRREQ-513654
3.6.4	5G FR1 SA RRC inactive state current drain	GID-MTRREQ-513660
3.6.5	5G FR1 SA standby current drain	GID-MTRREQ-513656
3.6.6	5G FR2 NSA PDCCH + 4G PDCCH Connected mode current drain	GID-MTRREQ-483802
3.6.7	5G FR1 NSA PDCCH + 4G PDCCH Connected mode current drain	GID-MTRREQ-513676
3.6.8	5G FR1 NSA PDCCH + 4G PDCCH Connected mode current drain for Band41	GID-MTRREQ-513677
3.6.9	5G FR2 NSA PDCCH + 4G cDRX Connected mode current drain	GID-MTRREQ-483803
3.6.10	5G FR1 NSA PDCCH + 4G cDRX Connected mode current drain	GID-MTRREQ-513678
3.6.11	5G FR1 NSA PDCCH + 4G cDRX Connected mode current drain for Band 41	GID-MTRREQ-513679
3.6.12	VoLTE TalkTime current drain for 5G FR1 NSA capable device	GID-MTRREQ-513663
3.6.13	VoLTE TalkTime current drain for 5G FR2 NSA capable device	GID-MTRREQ-513664
3.6.14	VoLTE TalkTime current drain for 5G FR1+FR2 NSA capable device	GID-MTRREQ-513665
3.6.15	VoNR TalkTime current drain for 5G FR1 SA capable device	GID-MTRREQ-513666
3.6.16	5G FR1 SA PDCCH Connected mode current drain	GID-MTRREQ-513674
3.6.17	5G FR1 SA PDCCH Connected mode current drain for Band41	GID-MTRREQ-513675
3.6.18	5G FR1 SA and NSA Browsing for terminals with size up to 4 inches	GID-MTRREQ-519462
3.6.19	5G FR1 SA and NSA Browsing for Terminals with display size greater than 4 inches and up to 5 inches	GID-MTRREQ-519463
3.6.20	5G FR1 SA and NSA Browsing for Terminals with display size greater than 5 inches and up to 6 inches	GID-MTRREQ-519464
3.6.21	5G FR1 SA and NSA Browsing for Terminals with display size greater than 6 inches and up to 7 inches	GID-MTRREQ-519465
3.6.22	5G FR1 SA and NSA Browsing for Terminals with display size greater than 7 inches and up to 8 inches	GID-MTRREQ-519466
3.6.23	5G FR1 SA and NSA Browsing for Terminals with display size greater than 8 inches and up to 9 inches	GID-MTRREQ-519467
3.6.24	5G FR1 SA and NSA Browsing for Terminals with display size greater than 9 inches and up to 10.5 inches	GID-MTRREQ-519468
2.6.25	5G FR1 SA and NSA Video Streaming for terminals with display size up to 4 inches	GID-MTRREQ-519469
2.6.26	5G FR1 SA and NSA Video Streaming for terminals with display size > 4 inches and up to 5 inches	GID-MTRREQ-519470
2.6.27	5G FR1 SA and NSA Video Streaming for terminals with display size > 5 inches and up to 6 inches	GID-MTRREQ-519471
2.6.28	5G FR1 SA and NSA Video Streaming for terminals with display size > 6 inches and up to 7 inches	GID-MTRREQ-519472