

5G Conformance Test Platform

Verify SA or NSA mode conformance against 3GPP specifications.

Overview.

The **5G Conformance Test Platform** from Fime and DaTang Link Tester (DTLT) is a GCF/PTCRB validated test platform used to perform standalone (SA) or non-standalone (NSA) mode conformance testing required by mobile handset manufacturers, third party certification labs or MNOs against 3GPP TS 38.523-3 PTS, 3GPP TS 31.121 USIM and 3GPP TS 31.124 USAT.

Test your handset using a GCF / PTCRB validated test platform.

With the platform, you can test your handset over the Cu interface (SIM card) and the Uu interface (RF antenna) by simulating multi-app UICC & the RF network.

How it works.

SmartConnect and DTLT CTP3500 are controlled by the SMT test manager software and a range of parameters can be configured on both simulators to perform nominal and error testing on the device under test (DUT).

Fime can help you at any stage of your project lifecycle.

Define

Design

Deliver

Test



SA or NSA mode conformance verification platform.

Key benefits

- Test your handset using a GCF / PTCRB validated test platform.
- Validate custom operator test cases.
- Set frequency band, bandwidth and signal strength.
- Simulate nominal, error network, and UICC behaviors.
- Use an automated test solution with support for AT commands.
- Test manually or automatically.
- Outputs detailed technical test reports.

Key features

Automatically verify various terminal behaviors:

- Terminal identity & registration including decryption messages e.g. SUCI.
- Terminal responses triggered by different network emulator configurations.
- Valid terminal display of PLMNs.
- Terminal state authentication messages etc.

Specifications.

Industry Specifications supported.

- **3GPP TS 38.523-1, RAN 5GS** User Equipment (UE) conformance specification – Part 1: protocol.
- **3GPP TS 38.523-3, RAN 5GS** User Equipment (UE) conformance specification – Part 3: protocol test suites.
- **3GPP TS 31.121, CN&T** UICC-terminal interface – UniversalSubscriber Identity Module (USIM) application test specification.
- **3GPP TS 31.124, CN&T** Mobile Equipment (ME) conformance test specification – Universal Subscriber identity module Application Toolkit (USAT) conformance test specification.
- **3GPP TS 27.005, CN&T** Use of Data Terminal Equipment – Data Circuit terminating (DTE – DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS).
- **3GPP TS 27.007, CN&T** AT command set for User Equipment (UE).
- **3GPP TS 31.102, CN&T** Characteristics of the Universal Subscriber Identity Module (USIM) application.
- **3GPP TS 31.111, CN&T** Universal Subscriber Identity Module (USIM) Application Toolkit (USAT).
- **3GPP2 C.S0065-B** CDMA200 Application on UICC for spread spectrum systems.
- **3GPP2 C.S0035-A** CDMA Card Application Toolkit (CCAT).
- **ETSI TS 102.221, Smart cards** UICC-Terminal Interface – Physical and Logical Characteristics.

Test packages.

USIM WI-508 Tests according to the following 3GPP test specifications:

- 3GPP TS 38.523-3 RAN.
- 3GPP TS 31.121.

USAT WI-509 Tests according to the following 3GPP test specifications:

- 3GPP TS 38.523-3 RAN.
- 3GPP TS 31.124.

Operator test packages (optional).

CMCC USAT test cases – Customized USAT test cases for CMCC.

CMCC USIM test cases – Customized PIN validation USIM test cases for CCTL.

What's in the box?

The **5G Conformance Test Platform** comprises of the following software and hardware components:

Software

- DTLT SMT test manager including protocol analysis functionality.
- **Mobile Handset Test Platform.**
- **Mobile Spy.**
- **3GPP and Operator Test Cases.**

Hardware

- DTLT CTP3500 (Network emulator).
- **SmartConnect** (UICC simulator).

* Customers need to purchase the DTLT SMT and CTP3500 direct from DTLT.

Technical specification.

Advanced features

- Automation of integrated test cases run on the Fime **SmartConnect** and the DTLT CTP3500.
- Set frequency band, bandwidth & signal strength.
- Supports manual testing or automatic test modes.
- Outputs detailed test reports.

Mobile Log Viewer

Use **Mobile Log Viewer** to view exported test certificates. People who do not have **Mobile Spy** or **Mobile Card Test Platform** can still review test certificates. **Mobile Log Viewer** is free to use and can be downloaded from our website.

Making innovation possible.

Making the world work.

Consulting | Test Platforms | Testing Services

Contact

To learn more about how Fime can help your business:

fime.com

sales@fime.com

F-T-5GCONFORMANCE-AA
SA or NSA mode conformance verification platform.

© Fime 2025