PRODUCT BRIEF



MICRO LINE TESTER (MLT™) - MLT1600

OCTOBER 2017

The Industry's Most Cost-Efficient Product for IoT Device Conformance and Certification

Typical Use – Three Modes of Operation

Standalone

Network emulation during device or chipset R&D process – control your network in a manual mode or use preconfigured parameters. Attach, check IMS connection, check signaling, troubleshoot – you are in control.

Developer

Scripting test cases in a developer mode – to meet your unique testing needs. A scripting editor with an easy to use UI is available in this mode.

Conformance

Access to a carrier-specific test case library in an automated mode to test your device to meet carrier acceptance requirements

System Features

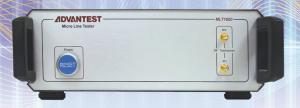
- Multi-Band LTE, WCDMA & GSM support (70MHz to 6GHz)
- Supports Cat-M1 and NB-IoT devices
- Attach up to 32 devices
- Perform functional tests with carrier validated test cases
- Easy-to-use software with fully automated MLT control
- Unified log-view with extensive multi-level reporting
- Fully controllable negative scenarios
- UE automation with AT commands, Android adb, Linux, or batch files
- · Cloud-based software and user management
- Cloud-based report aggregation (optional)
- UICC test card(s) when required

Test Plans/UE Profiles Software Updates Software Updates W2B1 Cloud Services MLT1600 Base Station (2G/3G/4G) • eNodeB, EPC, IMS • Test Automation • Analytics & Logging • UE Pofiles Standalone, Developer & Conformance Modes

SYSTEM OVERVIEW

MLT supports IoT device and smartphone development, device launch, conformance/certification, carrier acceptance, and production testing.

MLT is a self-contained portable and cloud-managed test system. It provides functional test environment with user accounts, activation/maintenance, test plans, and reporting analytics/publishing. The system is designed to be managed from the cloud and is capable of scaling to hundreds of remote sites.



BENEFITS

SMALL FOOTPRINT -LESS POWER, LESS HEAT, AND QUIET OPERATION

ECONOMICAL TO BE DISTRIBUTED ACROSS REMOTE GROUPS TO ACCELERATE TTM

FULLY CONTROLLABLE eNodeb, EPC, AND IMS FOR EXTENSIVE TEST SCENARIOS

END-TO-END SERVICE
TESTS ACROSS MULTIPLE
CONNECTED DEVICES

MLT1600 System Specification

- Multiple LTE FDD & TDD Band Capable
- LTE-FDD Bands: 1/2/3/4/5/6/7/8/9/10/11/ 12/13/14/17/18/ 19/20/21/22/23/24/25/ 26/27/28/28/30/31/66
- LTE-TDD Bands: 33/34/35/36/37/38/39/ 40/41/42/43/44
- Bandwidth: 1.4, 3, 5, 10, 15, 20 MHz
- Modulation Schemes up to 256 QAM
- MIMO Expandable
- 3GPP R13
- IPv4/IPv6
- Max RF Output: 15 dBm
- Dimensions: 220 x 100 x 300 mm (8.6 x 3.9 x 11.8 inch)
- Operating Temp Range: 0 45 deg C

Test Area Coverage

- VoLTE (end-to-end call)
- LTE SMS over IMS
- . IMS Registration and Retry
- Data Throughput
- Data Retry
- AT Commands
- UICC Conformance & Activation
- OTA Device Management
- Signaling Conformance
- User Experience

LTE Feature List

- · Cell Parameter Configurations
- RF Power Setting
- NAS Parameter Configurations
- MO, MT, and end-to-end SMS
- MO, MT SMS over NAS
- Volte E2E Call
- SIM Security Parameters
- IMS Error Scenarios
- LTE Error Scenarios
- PDN Connection Reject Scenarios
- S1 Handover
- Reselection
- RRC Release
- Network Initiated Detach
- E911
- Extended Service Request
- Wireshark logging S1ap, SIP, RRC

NAS/RRC Custom Features

- EPS Network Feature Support
- IMSVoPS
- Emergency Bearer Service Indicator
- Location Service Indicator
- Support of Extended service request
- Attach Type
- Keep RRC connection
- Auth Algorithm
- Operator Variant
- NAS Security Algorithm
- RRC Security Algorithm
- AMF Value
- Key Value
- OP/OPc Value
- Handover Scenarios
- Additional Update Result
- · Reject Scenarios
- T3402, T3412
- . ETWS and CMAS
- RRC Redirect

WCDMA Feature List

- 3GPP R7 Support
- PS/CS Combined Attach
- 3G SIM Authentication
- WCDMA Attach Validation
- WCDMA Attach Reject Cause with Cause Value 11, 12, 13, 14, 15, 25
- Session Verification in PDN Connectivity Requested By UE
- PDN Verification in Attach Request
- RAU Configuration and Verification
- MO Voice Call
- MT Voice Call
- M0 SMS
- · Network to UE Paging
- RRCRequest Reject Scenarios
- RF Level Configuration
- · Gsmtap/Wireshark Logging
- SG SMS/SIP SMS

GSM Feature List

- GSM Registration Validation
- GSM Attach Reject, with Cause Values 11, 12, 13, 14, 15
- PDN Connectivity Requested By UE Verification for Session
- PDN Verification in Attach Request
- GSM Location Update Reject Cause with Cause Value 11, 13, 15
- MO Voice Call
- MT Voice Call
- M0 SMS
- · Network to UE Paging