

NE6000/7500 LTE-A / 5G NR Network Emulator Signaling Test System

Most Affordable Test Solution for R&D and End of Production Line Verification

- Compliant with 3GPP
 5G NR Release 16
- FR1/FR2
- FDD/TDD
- MIMO

- NSA/SA
- RF Parametric Measurement
- R&D Regression and UE Performance Testing





NE6000/7500

LTE-A/5G NR Network Emulator

NE6000/7500 LTE-A/5G NR Signaling Test System

Description

The ALifecom NE6000/NE7500 is a test system designed to simulate various aspects of a cellular network for the purpose of testing the performance and functionality of user equipment (UE), such as smartphones, tablets, and other wireless devices. It includes 3GPP compliant components such as an eNodeB, a gNodeB, an Evolved Packet Core (EPC), and a 5G Core (5GC).

The system is used for a variety of purposes, including R&D regression testing, stability testing, and end-of-production line verification. It can be used to perform RF measurements, IP/MAC throughput tests, MIMO tests, inter- and intra-cell handover tests, and user experience tests. These tests can help ensure that the UE is functioning properly and meets the performance standards required for use in a cellular network.

Signaling Testing Features

- Frequency Range: FR1 and FR2(with MM100)
- Bandwidth Up to 100MHz
- NSA/SA Mode
- iPerf IP/MAC layer Throughput Testing
- RF Parametric measurement (PWR/EVM/ACLR/ Spectrum Mask/OBW)
- UL UE Max PWR Testing/DL RSSI Reporting/UE RX Sensitivity Testing
- Inter/Intra Cell Handover
- Embedded Protocol Analyzer
- Carrier Aggregation:
 - LTE-A: 2CA DL 2x2 MIMO,
 - 5G NR FR1/FR2: 2CA DL 4x4 MIMO



4G/5G Test Items

Attach/Detach	RSSI
IMEI	Handover (FDD/TDD)
Band List	VoLTE/VoNR
APN	Protocol Analyzer
MAC Throughput	SMS Test
IP Throughput	PWS
TX Power	NB-IOT PSM/eDRX Test
Sensitivity	eMTC PSM/eDRX Test

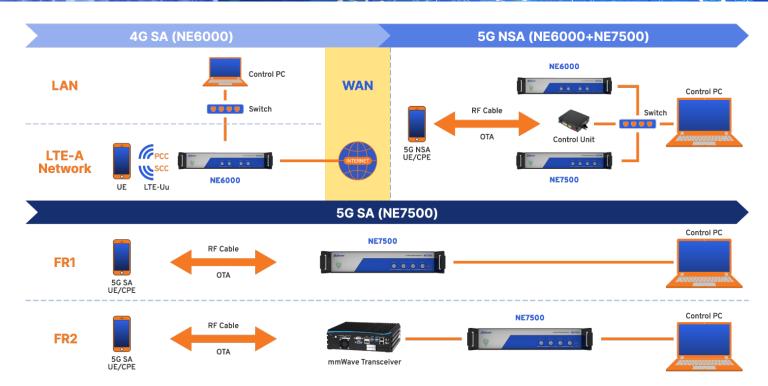


NE6000/7500

LTE/5G NR Network Emulator

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Friendly GUI and Useful SW Tools ____

ALifecom provides a range of software tools (CTS, MTS and ATS) that can be used to cover various testing scenarios and segments in the development and integration of 5G NR SA/NSA devices as well as LTE devices.

UE StatusBand List	ALTECOM	Link Status
ENDC	SG NSA Plus ULARCN 19575 ULARCN 19575 ULARCN 63666 ULARCN 192768.8200 × Activated ULARCN 19576 PRODUCTION REASERSTANDARY RANN INVERTING 1975 PRODUCTION RANN INVERTION RANN INVERTING 1975 PRODUCTION RANN INVERTION RANN INVERTI	
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	OR KSS Report UL RSS Report UL RSC ULtelormationTransfer UL RSC ULtelormationTransfer UL RSC ULtelormationTransfer UL RSC ULtelormationTransfer UL NSC ACTIVATEDDICATED BY BEARER C	RRC/NSA
DL/UL MAG	C RSRP -60 N/A -65 N/A of the constant of the	Protocol
throughpu	RSID -10 N/A -10.5 N/A di diff - 0.6 - 0.	Message

SW Tools

ATS – 1-DUT production test SW iATS – multi-DUT (max. 4 UE's) for production test MTS – Generic GUI for NE6000

CTS-Lite – Generic GUI for NE7500 **CTS** – Advanced GUI with applications test function and protocol analyzer for NE6000/NE7500



Order Options

Model	Туре	Description	SW Tools Included
NE6000-IOT	Production	 LTE-A FDD/TDD Dual Mode 400MHz to 3.8GHz Cat.1/NB-IOT/eMTC RF Ports x 2 	ATS+iATS+MTS
NE6000P	Production	 LTE-A FDD/TDD Dual Mode 400MHz to 3.8GHz NB-IOT/eMTC/Cat.1 to Cat.4 RF Ports x 2 (4 with Cat.6) 	ATS+iATS+MTS
NE6000R	R&D	 LTE-A FDD/TDD Dual Mode 400MHz to 3.8GHz NB-IOT/eMTC/Cat.1 to Cat.4 RF Ports x 2 (4 with Cat.6) 	ATS+iATS+CTS
NE7500P	Production	 5G NR SA (FDD/TDD) FR1:400MHz to 6 GHz 100 MHz BW DL 4x4 MIMO 256QAM DL / 64QAM UL RF Ports x 4 	ATS+iATS+CTS-lite
NE7500R	R&D	 5G NR SA (FDD/TDD) FR1:400MHz to 6 GHz 100 MHz BW DL 4x4 MIMO 256QAM DL / 64QAM UL RF Ports x 4 	ATS+iATS+CTS
NE7500NSA	Production	NE7500P x1NE6000P x1	ATS+iATS+CTS-lite
NE7500NSA+	R&D	 NE7500R x1 NE6000R x1 Control Unit (EPC) x1 	ATS+iATS+CTS

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