

LabKit Features

— LabKit 4G Features - RAN

Feature	STATUS
3GPP release	8.6 compliant and part of Release 10
LTE Band	Band 40 TDD, Band 7 and 4 FDD validated, all band between 400 MHz to 6GHz
LTE Bandwidth	5, 10, 20 MHz Validated while 1.4 and 3MHz available by end Q1 2022
Duplex Mode	FDD tested, TDD only configuration 3
Transmission Mode	1, 2 (stable) 3, 4, 5, 6, 7 (to be validated)
Max # of antennas	2
CQI/PMI reporting	aperiodic , feedback mode 3 - 0 and 3 - 1

Feature	STATUS
PRACH preamble format	0
DL Supported Channels	PSS, SSS, PBCH, PCFICH, PHICH, PDCCH, PDSCH, PMCH, MPDCCH
UL Supported Channels	PRACH, PUSCH, PUCCH (format 1/1a/1b), SRS, DRS
HARQ support	UL and DL
Multi-RRU support	Over the air synchro b/ multi RRU in TDD mode
LTE-M	Coverage Enhancement mode A, single LTE-M connection, legacy LTE UE attach is disabled
MCE	Support rel 14.0.1: M2 interface for eMBMS

— LabKit 4G Features - EPC

Feature	STATUS
HSS & MME interface	S6a Supported
HSS to SGSN & to SCEF	S6d/t Not Supported (3G feature)
HSS to SCEF	S6t implemented but need to be validated
HSS to SMS functions	S6c to be validated with SMS platform
S1-MME	Up to rel.10
S11	Interface between the MME and S-GW in an LTE network.
S10	Interface between multiple MMEs
SIM Card	Only Milenage supported

Feature	STATUS
NAS signalling/security	Supported
PDN GW & Serving GW selection	Supported. S/P-GW selection & neighboring MME selection via WRR
Tracking Area list management	Supported
Bearer management	Supported including educated bearer establishment
UE Reachability procedures	Supported
Packet routing and forwarding	UE IP address allocation, Per-user based packet filtering
Support M3 interface	Support M3AP layer based in Rel v14.0.1



— LabKit 5G Features - NR

Feature	STATUS
3GPP release	Release 16
5G Band	Only FR1, n78 tested in NSA configuration only
5G Bandwidth	10, 20, 40 MHz available, 80 and 100 MHz need to change the USRP with N310 model
Duplex Mode	FDD tested, TDD Static only
SubCarrier Spacing	30 kHz
Max # of antennas	1