

XCAL-MUbox

Slot-based scalable Multi-UE traffic generator

XCAL-MUbox is a scalable multi-UE traffic generator that utilizes LTE and 5G UE modules to test base stations. Designed as an 8-UE-per-slot unit, it can be scaled to support more than 1,000 UEs (64 UEs per chassis and up to 320 UEs per rack), enabling large-scale testing of base station capacity and network reliability.

It provides an optimal MIMO environment through a wired RF connection interface, ensuring precise and controlled testing. In addition to directly connecting to base stations for load testing, XCAL-MUbox can be integrated with Accuver's RF attenuator or Channel emulator to perform scenario-based performance tests in various multi-user environments. Compared to using actual smartphones, it offers greater configuration flexibility and cost efficiency. Test management and log analysis are handled by the built-in CPU, eliminating the need for additional computing resources.

Features

- * Support scalability beyond 1000 UEs
- * Provides an optimal MIMO environment using a wired RF connection
- * Built-in CPU board
- * Support replaceable SIM slots

Functions

- * Load & Stress test with communication modules
- * Support various mobile technologies : 5G, 4G, 3G, etc.
- * Measure various messages : Layer 1/2/3
- * Support application automation test : VoLTE, iPerf, PING, Attach/Detach



Mode	Frequency Bands
5G NR SA	- n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79 - DL 4 x 4 MIMO: n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79 - UL 2 x 2 MIMO: n38/n41/n48/n77/n78/n79
5G NR NSA	- n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79 - DL 4 x 4 MIMO: n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79
LTE	- FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 - TDD: B34/B38/B39/B40/B41/B42/B43/B46(LAA)/B48 - DL 4 x 4 MIMO: B1/B2/B3/B4/B7/B25/B30/B38/B40/B41/B42/B43/B48/B66
WCDMA	- B1/B2/B4/B5/B8/B19
Item	Spec.
CPU	Intel Xeon D1715TER 2.4GHz
Memory	16GB RAM
SSD	2TB
# of UEs	Up to 64 per Chassis - 8 Modules per Board - 8 Board per Chassis
OS	Windows 11 Pro
OS Recovery	Support
Size	436.8 x 354.5 x 637.0(mm)
Weight	45 (kg)
Structure	- Chassis: 64 UEs - Rack: 320 UEs - Multi-Rack: 1,000+ UEs