ACCUVER

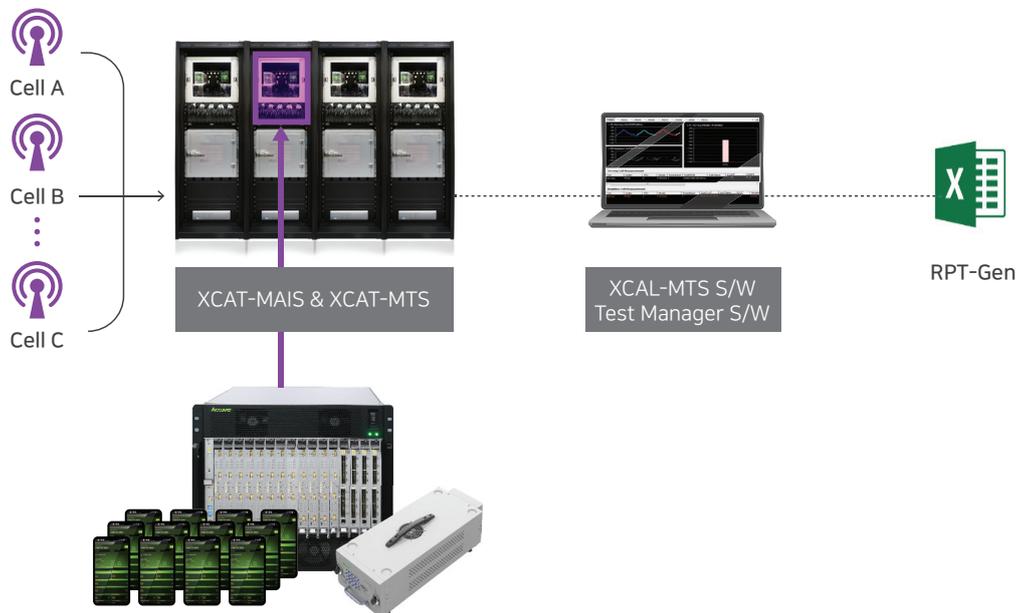# XCAT-MAIS   Massive MIMO air interface simulator

XCAT-MAIS (Massive-MIMO Air Interface Simulator) is a real-time versatile system simulator, consisting of 3G/4G/5G channel emulator and logging/analysis tools that enables system engineers to verify system performance with 3G/4G/5G cells and UEs by generating various field environment consistently and repeatedly in the lab.

Features

* Automated self-calibration for CR satisfaction (5G)
* User-adjustable amp/phase
* Monitor BS/UE inputs & outputs at each RF port
* User-defined scenarios and associated channels
* Automatic/manual call set up
* Selectable KPI logging and in-depth Analyzer
* Easy & simple system expansion by adding slot cards

Cell A

Cell B

Cell C

XCAT-MAIS & XCAT-MTS

XCAL-MTS S/W
Test Manager S/W

RPT-Gen

Functions

* Support latest wireless technology
  : 5G, Massive-MIMO, Beamforming
* Simulate various test environment
  : Scattering, Reflection, Diffraction simulation by Multi-path fading channel
* Distributed lab environment
  : With MAIS, BS and UE don't have to be co-located, allowing international users to log in and access system resources at any time

Title	Spec.
Frequency	300 ~ 6,000MHz
Channel Bandwidth	100MHz
Insertion Loss	0dB
Path Loss control	0 ~ 89.5 dB, 0.5 dB step
System Delay	3.1 us
Calibration tolerances	$|\Delta Amplitude| < 0.35$ dB, $|\Delta Phase| < 3$ degree using external calibration hardware
RF Interface	Scalable by 4, up to 64 per chassis, TRX port
Max. power	+0 dBm (CW) per RF port (input/output)
Channel Models	ITU Ped. A/B, Veh. A/B, EPA, EVA, ETU, HST, 2D/3D SCM
Multi-path	8 per connection, each ranges from 0 to 25 us
Doppler Frequency	Up to 450 Hz (1350 Hz for HST)