Anritsu envision : ensure

Azimuth

# ACE RNX Channel Emulator

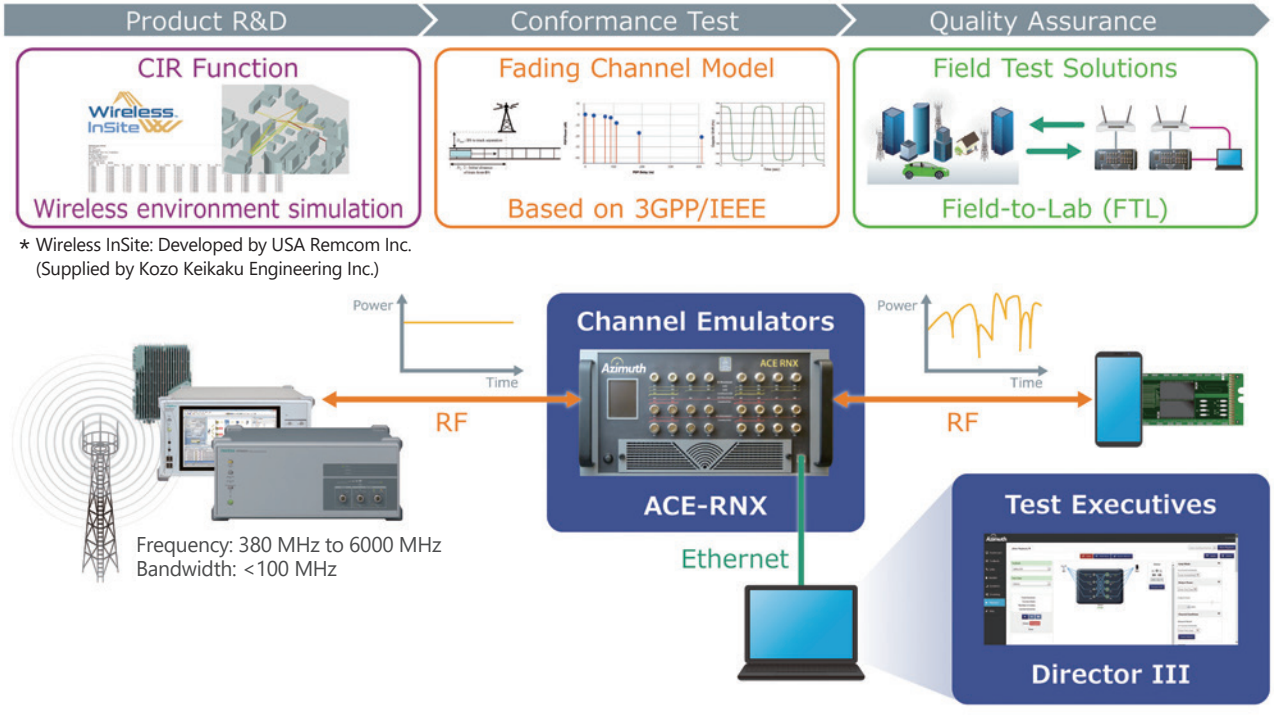
## Channel Emulator ACE-RNX


## Advanced and Complex Wireless Propagation Environments

Mobile communication systems are advancing with R&D into commercial rollout of next-generation 5G in 2020.
5G features a new 28-GHz frequency band and better radio-wave directivity, making it more advanced and complex than previous generations. In addition, the spread of IoT technologies is expected to result in a sudden increase in device numbers. These wireless propagations including many different signal types will create a complex radio-wave environment.
Under these conditions, there may be problems such as wireless dead spots, as well as locations with low data throughput rates and very high latency, possibly having a negative impact on higher-level applications. Consequently, quality testing of wireless propagation environment is likely to become a key future.

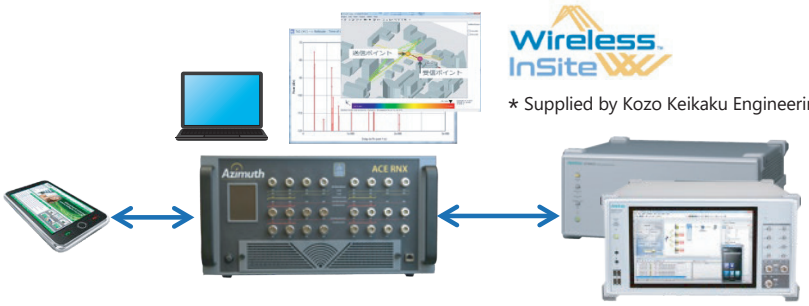
## Configuring Test Systems with Wireless Propagation Path

The Azimuth ACE RNX Channel Emulator applys different wireless propagation environments to various RF signals.
The ACE-RNX is an effective solution for the three key phases of wireless product development: 1. R&D evaluations based on simulations; 2. Pre-release performance evaluation; and 3. Post-release quality warranty testing.



At the communications-module R&D phase, we recommend general evaluation including the following wireless propagation environment steps. This type of step-wise evaluation helps improve module performance quality and reduces field problems.

### Step 1 Confirm terminal performance based on theoretical values.




* Supplied by Kozo Keikaku Engineering Inc.

### Step 2 Evaluate basic function performance.

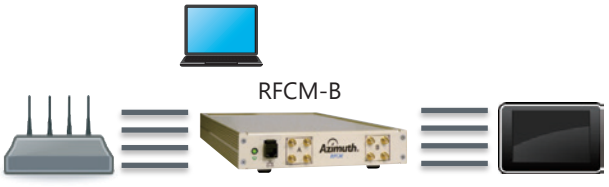
### Step 3 Evaluate in 3GPP-defined fading environment.


### Step 4 Confirm operation in degraded RF environment (in field).


## Other Azimuth Products

Various other simulators for wireless propagations are available, such as the STACSIM for configuring fixed propagation paths with a Butler Matrix supporting up to 4×4 MIMO when requiring a low-cost, stable wireless propagation path, and the RFCM-B for adding a variable attenuation function to the STACSIM.
Please consult our sales representative for more information.


Fixed Propagation Path




Fixed Propagation Path + Variable ATT