We are entering the mobile broadband era, and mobile operators are preparing their networks to handle massive amounts of multiplay traffic (voice, video, and data). New wireless technologies promise to not only supply additional capacity, but allow operators to more intelligently manage the traffic on their networks through improved policy management.

Emerging 4G technologies are complex, and must be backwards compatible with existing 2G and 3G technologies for a seamless transition and a positive user experience. Ixia’s cutting edge wireless test solutions and deep knowledge of the wireless market can help you understand what to test for, why to test, and how to test existing and emerging wireless technologies in the most cost effective and efficient manner.

Ixia provides the industry’s most comprehensive wireless test portfolio, encompassing both deep functional testing and high scale capacity and performance testing across multiple technology generations. Equipment manufacturers and mobile operators can rely on Ixia’s solutions to cover their entire wireless testing needs. Our industry-leading test capabilities cover both wireless access and wireless core, including the 3G packet core, 3G circuit switched core, 3G radio access network, LTE access, LTE evolved packet core, and SS7/PSTN interconnect.

Ixia’s test solutions:

- Ensure a reliable radio link between user equipment and the radio base station with physical, protocol, and application layer testing
- Maximize and verify access and core device throughput
- Validate control (signaling) plane functionality and performance
- Test handover scenarios and interoperability between 2G, 3G, and 4G
- Measure the performance and accuracy of deep packet inspection (DPI) engines and security gateways
- Perform service validation through advanced mobile subscriber modeling at high load rate with quality of experience (QoE) metrics
Ixia’s wireless test solution offers:

- Best-in-class scalability – hundreds of gigabits of data, millions of stateful transactions per second
- Best-in-class QoE metrics – real world mobile subscriber modeling with multiplay voice, video, and data service emulation
- End-to-end service quality validation
- eNodeB wrap-around testing
- Evolved packet core (EPC) performance testing
- Wireline and wireless internetworking
- Multiple technology generations – 2G, 3G, LTE, SS7/PSTN, IMS

### Wireless Test Configurations