# SPIRENT 8100 MOBILE DEVICE TEST SYSTEM

## LTE Data Retry

Delivers an automated solution for repeatable Data Retry performance and latency testing of LTE devices.

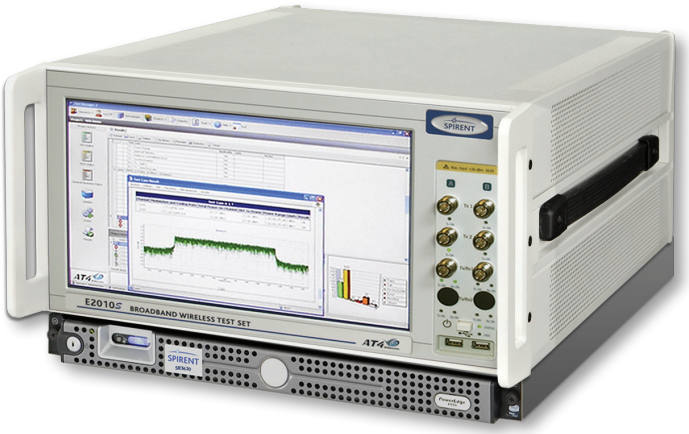
### APPLICATIONS

**Manufacturers:**

- Research & Development
- Design verification
- Performance analysis
- Benchmarking
- Regression test

**Operators:**

- Pre-launch evaluation
- Acceptance test
- Firmware regression test
- End user and network KPI analysis




Over the next several years at least, LTE will be an overlay service that runs in conjunction with CDMA2000 and UMTS services. Subscribers want to know that they can seamlessly and transparently transition to LTE service where it's available and back to legacy services where LTE is not deployed. Operators need to know that they are neither giving away premium services for free nor denying service to paying subscribers.

Proper operation, then, relies heavily on the Mobility Management and Call Control layers of the protocol stack. This echoes a scenario uncovered years ago when mobile data usage was new: what happens when a mobile device is denied service due to a failed service, gateway denial or unavailable network resource?

If a large number of similar mobiles suddenly launch into an infinite loop of network access requests, a network can quickly be brought to its knees in a "death spiral" of wasted bandwidth. This is why operators demand Data Retry testing. Spirent pioneered Data Retry testing several years ago, helping operators avoid network breakdowns and device manufacturers avoid taking public blame for outages.

### BENEFITS

- *Reduce time to market* – run both conformance tests and operator-acceptance tests on a single, automated platform
- *Get real expertise in data retry testing* – from the experts who pioneered it
- Detailed automated reporting helps hone in on bugs quickly and efficiently

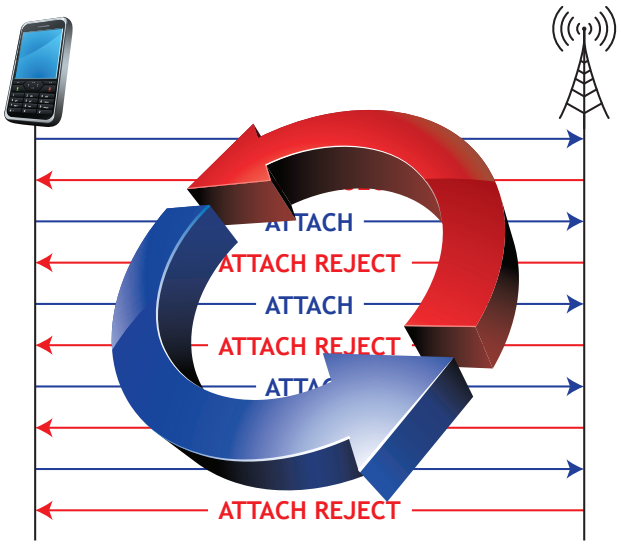
## KEY FEATURES

- Verifies that a UE-initiated request does not inundate the network with retries under failure conditions or when the network is busy
- Protects existing investment in Spirent CDMA and UMTS solutions as well as other operator-acceptance and conformance solutions
- Powerful device automation and monitoring during testing
- Powerful TestManager test executive software automates testing
- Comprehensive data collection, results analysis, and reporting

## ABOUT DATA RETRY TESTING

Data Retry testing verifies that no matter what kind of network issue prevents connection (network resource or bandwidth exhaustion, simple connection issues, IMS application server failure) the device's internal timers will properly control the frequency of connection attempts or attach attempts.

This field of testing is largely driven by operator-acceptance test plans. It involves examining device responses and retry timing when presented with any of a large number of "reject codes" generated by Evolved Packet System (EPS) mobility management and EPS session management control procedures. All of this functionality is fully automated by the 8100 system, as is the generation of a comprehensive report.




## ORDERING INFORMATION

LTE Data Retry testing is supported on the B200, B300, B400 and B600 configurations of the Spirent 8100 Mobile Device Test System.

Please contact your regional Spirent sales representative for detailed ordering information.

| Part Number | Description |
|---|---|
| TP-DATA-RET-LTE-TP1 | **LTE Data Retry Test Pack** |

## SPIRENT GLOBAL SERVICES

Spirent Global Services provides a variety of professional services, support services and education services — all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services website at www.spirent.com/gs or contact your Spirent sales representative.

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