E6474A Drive Test
Wireless Network Optimization Platform - LTE

Key Features

- UE Device and Measurement Receiver support
- Multiple Devices supported on a single laptop
- Industry leading data test support
- Open architecture for post processing or dedicated post processing toolbox
- Indoor and outdoor measurement capability
- Real-time parameter mapping with base station overlay
- User definable events triggers
- Fast, accurate receiver measurements
- Fully scalable solution from Receiver or UE device to full combo
- Data logs can be imported into JDSU Signalling Analyzer for end-to-end protocol trace
- Full support for legacy technologies HSPA+/UMTS and 1xEV DO/cdma2000

Key Benefits

- Platform stability – Improved user productivity
- Easy to use
  - Customize the GUI to visualize data exactly how you need it
  - Maximize your efficiency in detecting and isolating problems
- Single platform that can expand as your needs increase – Lowers your cost of ownership
- Project files allow easy sharing of test configurations – Improve consistency of collected results
- Click’n’Sync visualization simplifies troubleshooting – Find problems faster!
- High accuracy RF measurements - Reduces measurement uncertainty.
- Freedom of choice for post processing tools

Troubleshoot and optimize LTE wireless networks with a comprehensive, flexible solution

The JDSU Drive Test solution enables wireless service providers and network equipment manufacturers to efficiently deploy and optimize today's increasingly complex wireless voice and data networks. A single flexible user interface spans all the most popular wireless technologies used globally.

The JDSU market leading Drive Test solution provides the key measurements you need to optimize and troubleshoot your FDD-LTE and TD-LTE networks. Supporting both UE device measurements and the JDSU multi-band, multi-technology receivers, you have the ultimate toolkit to optimize and solve your network problems.
## LTE UE Measurements

<table>
<thead>
<tr>
<th>Cell &amp; Access Information</th>
<th>Physical Shared Channel Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTE 3GPP Cell Information</td>
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<tr>
<td>LTE Physical Cell Information</td>
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<tr>
<td>LTE Serving Cell Signal Quality Info</td>
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<td>LTE CQI Information</td>
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<td>LTE PBCH BLER</td>
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<tr>
<td>LTE Path Information</td>
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<td>LTE RACH Request</td>
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<td>LTE RACH Response</td>
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<td>LTE QCI Information</td>
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<td>LTE PDSCH BLER</td>
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<tr>
<td>LTE PDSCH PHY Throughput</td>
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<tr>
<td>LTE PUSCH PHY Throughput</td>
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<tr>
<th>Scheduler Information</th>
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<tbody>
<tr>
<td>LTE UL Grant and DL Ack/Nack</td>
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<tr>
<td>LTE UL Scheduling Status</td>
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<tr>
<td>LTE ULControl Information</td>
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<tr>
<td>LTE PDCCH DCI Detection Ver2</td>
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<tr>
<th>Mobile Information</th>
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<tbody>
<tr>
<td>LTE Antenna Correlation</td>
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<td>LTE Tx Power</td>
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<tr>
<th>Protocol Information Log</th>
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<tr>
<td>RLC Protocol Messaging</td>
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<tr>
<td>NAS Protocol Messaging</td>
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</table>
LTE Receiver Measurements

Supported frequency bands

Supported frequencies:
700 / 850 / 900 / 1700 / 1800 / 1900 MHz; 2.1 / 2.6 / 3.5 GHz

Please refer to W1314A Data Sheet (5989-7970EN) for band combinations.

LTE Measurement Bandwidths: 1.4 MHz, 3MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz

LTE Measurements Overview

LTE Channel Measurements (FDD-LTE & TD-LTE)
- Primary Sync Signal RSSI (P-SS)
- Physical Layer Identity NID \( N_{cell} \) \([0, 2]\)
- Secondary Sync Signal RSSI (S-SS)
- Physical Layer Cell Identity NID \( N_{cell} \) \([0, 503]\)
- Delay
- Reference Signal Received Power (RSRP) for antenna port 0 and port 1
- Reference Signal Received Quality (RSRQ) for antenna port 0 and port 1
- Reference Signal CINR (RS-CINR) for antenna port 0 and port 1
Drive Test Wireless Network Optimization Platform Options

The LTE Receiver solution supports both FDD-LTE and TD-LTE technologies. You can choose either or both options depending on the measurements you need.

- E6474A-645 FDD-LTE Receiver Measurements
- E6474A-646 TD-LTE Receiver Measurements
- E6474A-030 Indoor mapping license
- E6474A-040 MapX mapping license
- E6474A-060 1 Year Software & Support Update Service (SUS)
- E6474A-640 LTE UE Measurements
- E6474A-641 LTE UE Measurements Upgrade For LG Devices

Post Processing and Reporting

The Analysis Solution is a post-processing optimization platform that analyzes cellular interface data that was collected using the E6474A Drive Test Wireless Network Optimization Software. The options below let you create post-processing configurations that are suitable for particular optimization needs.

- E6474A-910 Analysis Solution
- E6474A-911 Custom Report Generator for Analysis Solution
- E6474A-915 GSM/GPRS/EDGE Technology Toolbox License
- E6474A-916 UMTS/HSPA Technology Toolbox License
- E6474A-917 CDMA2000/1xEVDO Technology Toolbox License
- E6474A-918 WiMAX Technology Toolbox License
- E6474A-919 LTE Technology Toolbox License

Additional Information

- E6474A Product Overview
- W1314A Receiver Data Sheet
- UMTS/HSPA+ Technical Overview
- cdma2000/EVDO Technical Overview

Update Rates (FDD and TDD Mode)

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<thead>
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<th>Number of carriers</th>
<th>Update Rate (updates/sec)</th>
<th>Power Scan</th>
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<th>Channels</th>
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<td>10</td>
<td>5 MHz</td>
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<td>LTE - 5 MHz BW</td>
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<tr>
<td>LTE - 10 MHz BW</td>
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<td>LTE - 15 MHz BW</td>
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<td>LTE - 20 MHz BW</td>
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