

Product Capabilities



Wireless

Aeroflex offers a wide range of system, protocol, physical layer and parametric test solutions for the wireless communications industry. Its products address infrastructure and mobile handset testing and support all stages of mobile phone and radio access network equipment development and deployment. Applications include R&D, conformance, manufacturing/production, installation and commissioning, field services and network optimization. Aeroflex's wireless products test all key 2G, 2.5G and 3G wireless technologies including UMTS, cdmaOne, CDMA2000, TD-SCDMA, GSM, GPRS, EDGE, WiMAX and LTE worldwide.

Wireless R&D and Conformance Test

Aeroflex has a comprehensive range of test systems that can be used for testing of mobile phones and base stations for all the major mobile phone standards, GSM, CDMA, WCDMA and WiMAX. Test systems are available that can be used at all stages of device development and test, from R&D through to certification:

- Protocol stack development
- Chipset development
- System integration
- Regression test
- Interoperability testing
- Conformance and pre-conformance testing

Test systems are available for both RF and protocol conformance testing. Aeroflex delivers fully compliant test cases approved by the Global Certification Forum (GCF), PCS Type Certification Review Board (PTCRB), CDMA Certification Forum (CCF) and the WiMAX Forum.

Cellular Parametric

Installation, Commissioning and Maintenance Testing of Radio Base Stations

Aeroflex, through its Marconi, IFR and Racal Instruments Wireless Solutions brands, is able to offer a wide selection of cellular test sets addressing both mobile and base station test applications.

7100 Digital Radio Test Set



Bench-top instrument with embedded PC and large touch-screen display

- 6 GHz frequency range, covering all LTE spectrum allocations
- 3GPP Rel-8 LTE protocol stack included
- Comprehensive suite of parametric measurements
- Protocol logging and analysis
- Automatic network simulation
- Functional testing
- End-to-end IP packet data test
- Speed and precision for end-of-production-line quality tests

The Aeroflex 7100 LTE Digital Radio Test Set provides all the tools required during the design, development and test stages of UE chip sets and terminals meeting the new Rel-8 standards. All the key measurements are provided for characterizing the performance of LTE mobile devices, both at the radio interface and throughout the protocol stack, including the PCDP and IMS layers. End-to-end performance can be accurately assessed, along with correct idle mode and connected mode behavior with the 7100's Network Simulation mode.

Typical users of the 7100 LTE Digital Radio Test Set include RF developers, protocol stack teams, integration test groups and pre-conformance labs that are developing sub-systems and integrated designs that meet the requirements of the LTE standards. The 7100 also supports end-of-production-line manufacturing tests, allowing sample tests on high-volume production lines to be executed. These teams benefit from the ease of use, comprehensive test capability, speed and low cost of ownership offered by the 7100.

Aeroflex Wireless Products

- 6103 GSM/GPRS
- 6104 GSM
- 6113 AMR
- 6113 GPRS/EDGE
- 7100 Digital Radio Test Set
- TM500
- 6413A UMTS
- SystemAT
- TX501

A passion for performance.

Infrastructure Test

Virtually every single base station in the world gets tested using Aeroflex equipment at some point in its life cycle whether in R&D, manufacturing or network installation and maintenance. Aeroflex products support the following critical test functionality:

R&D:

- TM500 LTE/HSPA+/HSPA test mobiles for leading edge L1/L2/L3 development
- TM500 multi-UE for functional, load and capacity testing at base station and network level

Manufacturing:

- 6113 GSM base station test systems for quality assurance and functional testing

Network rollout, maintenance and interoperability test:

- 6113 GSM and 6413A WCDMA base station test systems for critical RF performance measurements

Aeroflex, through its acquisition of the Ubinetics Special Products Group, creates testing solutions for infrastructure developers and network operators to assist them in debugging new network technologies and features, interoperability analysis, regression testing, network "stress" testing, acceptance testing, quality of service analysis and network performance optimization.

TM500 Test Mobile



In the demanding world of developing new cellular equipment, network infrastructure and base stations typically arrive long before mobiles. But without a mobile, how do you test them? Aeroflex, with its TM500 test mobiles provides the answer. Need an HSPA+ handset UE? Choose TM500. Need an LTE UE with 300Mbit/s performance? Choose TM500. Need multiple UE for LTE development testing which can be re-used as part of a capacity test solution? Choose TM500!

Every major infrastructure vendor and a majority of femtocell manufacturers use TM500 throughout the development cycle. Why? Because it's the industry standard for 3GPP verification, validation and optimization. From HSDPA through HSUPA and HSPA+ to LTE, TM500 offers all the capabilities of a mobile terminal with advanced test functionality. And what's more, the TM500 roadmap is always in step with the latest demands of the industry to help Aeroflex's customers deliver their new products on time.

Testing a single base station against a single mobile isn't enough though. Scheduling algorithms needs to be optimized and the base station needs to be load tested. With the TM500 Multi-UE functional and capacity test variants, complex scheduler, load and stress testing can be performed early in the design cycle and help deliver robust, flexible and high performance solutions to network operators.

Aeroflex test mobiles provide low level handset UE control and configuration flexibility combined with the detailed measurement data required by infrastructure engineers to rapidly diagnose engineering issues. New technology test mobiles such as those based upon LTE have leading edge roadmaps to support testing of the very latest 3GPP functionality.

Aeroflex Wireless Products

- 6103 AIME
- 6103 AIME AMR/CT
- 6103 AIME/CT
- 6103 AMR AIME
- 6113 EGPRS AIME
- 6401 AIME/CT
- 6401 AIME/CT ISHO
- 6402 CDMA-AIME
- 81532 TETRALOG
- MINT RF Tester
- Two-way AIM
- UMA/GAN
- WCDMA ACE
- WiMAX

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