Wireless Test System

Lower the cost of manufacturing test for wireless devices such as mobile phones, tablets, data cards, and connectivity modules with NI’s Wireless Test System (WTS).
Lower Your Cost of Wireless Manufacturing Test

With industry-leading measurement speed and the flexibility to engage in multi-standard, multi-DUT, and parallel test, the WTS integrates easily into a manufacturing line. It uses ready-to-run reference test sequences, integrated DUT control, and remote automation control. Each of these features provides quicker and more cost-effective system deployment and, when combined with the WTS’s shorter test times, a lower cost of test.

- Get fast measurements with up to 200 MHz of instantaneous bandwidth
- Cover more bands with 65 MHz to 6 GHz frequency range
- Test more devices with signal switching for multiplexing and broadcasting capabilities
- Increase throughput with 8- and 16-port options
- Get reliable results with built-in RF calibration port
- Simplify integration with an extensive SCPI interface via Ethernet
- Reduce development time with support for chipset vendor tools

The WTS incorporates an NI vector signal transceiver—a PXI instrument that combines a wideband vector signal generator and analyzer with a powerful FPGA—to help you meet the most challenging wireless test applications.

*Ethernet interface connects to PC (not pictured).
Innovative Solutions

Built for the multistandard, multi-DUT, and multiport test requirements of today and tomorrow, the WTS excels where traditional approaches fall short.

Test Devices Faster
Increasing market pressures and more complex wireless devices require test engineers to find innovative solutions to lower test cost and increase manufacturing capacity. Built on PXI, multicore, and FPGA technologies, the WTS offers industry-leading measurement speed to help you improve test throughput.

Rapidly Deploy Testers
The Wireless Test Module (WTM), an extension of TestStand, the industry-standard test executive, provides ready-to-run test sequences for devices from the leading wireless chipset vendors. Additionally, the WTS features a SCPI interface that allows remote automation over Ethernet and smooth integration into existing manufacturing lines.

Meet Future Requirements
The WTS includes full-duplex RF ports for MIMO, multistandard, and multi-DUT test while minimizing future-proofing concerns on a scalable platform. Wideband RF instrumentation and software-defined measurement IP further support current and future wireless standards.

Supported Wireless Standards
Increase test throughput with a powerful solution for high-volume production environments that enables the test of multiple wireless standards.

- Wi-Fi 802.11a/b/g/n/p/ac/ax
- Bluetooth and Bluetooth LE (v.5.0)
- Low-power wireless IoT: Zigbee and Z-Wave
- LTE-A/LTE/HSPA+/WCDMA/TD-SCDMA/CDMA2000/EDGE/GSM
- GPS
- FM/RDS

“The WTS allowed us to reduce our test costs by more than 25 percent. We are able to test four devices in parallel, with three antenna ports each, using multiple wireless technologies all with the same equipment.”

Enrique Gutierrez, peiker acustic GmbH
An Out-of-the-Box Solution

Develop, execute, and deploy automated test and validation systems faster with the Wireless Test Module.

Industry-Standard Test Executive
Combine the WTS with the WTM for an industry-standard, TestStand-based test executive software application for test automation. Create new test sequences faster and simplify complex measurement routines.

Third-Party Test Executive
Easily integrate the WTS into your own in-house test executive by using the SCPI remote automation interface. Gain the measurement speed benefits of the WTS while minimizing changes to your test software and infrastructure.

Chipset Vendor Tools
Use the WTS as a measurement solution with chipset vendor tools. Because these software tools natively support the WTS, you can quickly start testing a new wireless device without additional test software development.

Service Programs for WTS
Take advantage of services designed to meet the full spectrum of your wireless test application needs. Reduce total cost of ownership, minimize downtime, and ensure success with access to NI experts anytime you need them.

Standard Service—Included
Three-year Standard Service Program included with every WTS helps eliminate unexpected maintenance costs and address basic support needs.

- Extended Repair Coverage
- Discounted Calibration Options

Premium Service
For critical applications that demand a higher response time, NI express ships a replacement product within one business day of the request.

- Express System Replacement
- Extended Repair Coverage
- Discounted Calibration Options

PremiumPlus Service
When you require flexible service capabilities, NI offers highly customizable service options for large organizations or deployments.

- Custom Support Options
- On-Site Field Service
- Sparing and Repair Management
- Long-Term Application Support
- Development/Upgrade Assistance

ni.com/wireless-test-system