

### Delivering the flexibility to affordably test Bluetooth wireless connectivity

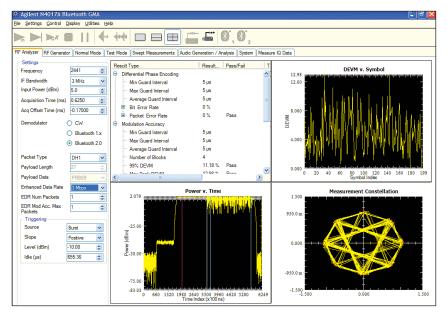
Streamline integration, improve RF performance, obtain faster, more accurate measurements, and minimize capital expenditures for test equipment — it's all possible with *Bluetooth* Enhanced Data Rate (EDR) solutions from Agilent.

The latest version of *Bluetooth* – *Bluetooth* EDR – supports data rates of up to 3 Mbps and remains backward-compatible with the original *Bluetooth* specification. Its two new modulation schemes allow multiple applications to utilize available bandwidth more effectively and achieve higher overall performance. The *Bluetooth* RF test specification, version 1.2/2.0/2.0+EDR [vol2], was developed by the *Bluetooth* SIG in order to provide a set of conformance tests for the air interface, as well as to ensure interoperability among *Bluetooth* devices.

## The industry's first one-box test solution for Bluetooth EDR Tx/Rx testing now supports EDR test mode

To ensure *Bluetooth* EDR devices adhere to the *Bluetooth* v2.0+EDR standard, the N4010A test set with Option 107 has six of the eight EDR test cases built-in, for fast, accurate loopback testing of *Bluetooth* EDR chipsets, modules, and devices.

# Agilent Innovative Solutions for Testing Bluetooth® Enhanced Data Rate Products



The N4010A-107 *Bluetooth* EDR link plus measurements make it easy to test *Bluetooth* EDR connectivity during development, integration, and manufacturing. Adding Option 107 to your existing N4010A test set lets you maximize your testing capabilities, while minimizing test equipment expenditures.

To provide a graphical user interface and PC control for the N4010A-107, use the N4017A Option 205 Bluetooth graphical measurement software application. Option 205 provides graphical views, including IQ constellation and detailed numerical results, making it an ideal development tool for R&D engineers and a well-designed debug tool for manufacturing test.

The N4010A test set is also flexible enough to provide a single, integrated platform for testing Bluetooth 1.2, WLAN 802.11a/ b/g, and  $ZigBee^{TM}$  wireless connectivity devices.

#### **Bluetooth EDR features**

- Bluetooth EDR loopback and transmitter test mode support
- Six of the eight EDR test cases built-in
- · Transmitter measurements
  - Carrier frequency stability and modulation accuracy (DEVM)
  - Relative Tx power
  - · Differential phase encoding
  - · Guard interval
- · Receiver measurements
  - EDR sensitivity
  - EDR BER floor performance
  - EDR maximum input level



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#### Order information

Model number	Description
N4010A	Wireless Connectivity Test Set
N4010A-101	Bluetooth test
N4010A-110 <sup>1</sup>	Additional input/output connectivity (required for N4017A operation)
N4010A-107	Bluetooth EDR link plus measurements
N4017A	Bluetooth Graphical Measurement Application
N4017A-205	Bluetooth EDR
Optional products	Description
N4010A-113	Bluetooth audio generation and analysis
N4010A-112	Bluetooth headset profile

#### **Related literature**

N4010A Wireless Connectivity Test Set, Brochure, 5989-4150EN N4010A Wireless Connectivity Test Set, Data Sheet, 5989-4035EN N4010A Wireless Connectivity Test Set, Configuration Guide, 5989-3486EN N4017A Bluetooth Graphical Measurement Application, Product Overview, 5988-2771EN

Bluetooth Enhanced Data Rate (EDR): The Wireless Evolution, Application Note, 5989-4204EN

#### For more information

Learn more about the N4010A test set at www.agilent.com/find/n4010a

For details on the N4017 *Bluetooth* graphic measurement application visit **www.agilent.com/find/n4017a** 

Option 110 (additional input/output connectivity) provided as standard on N4010A orders received after March 1, 2006.

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ZigBee is a trademark of The ZigBee Alliance.



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#### www.agilent.com/find/open

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## The complete list is available at: www.agilent.com/find/contactus

Product specifications and descriptions in this document subject to change without notice.

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