

Wish you could afford to put a real-life base station at every engineer's bench?



With the Agilent E6701C GSM/GPRS lab application you can!

Quickly and accurately validate real-life application scenarios for new wireless appliance designs

- Accelerate your development schedule at your bench within minutes of power-up – troubleshoot and verify your new GSM, GPRS, EGPRS (EDGE) signaling features
- Produce higher quality designs with the ability to stress and measure the performance of your wireless appliance's Internet Protocol (IP) data channel using the real-time air-to-LAN functionality over various slot and coding combinations
- Completely verify designs and quickly minimize the need to create custom debug code or build elaborate triggering hardware
- Dramatically reduce the test time for verifying infrequent network events

Agilent E6701C GSM/GPRS lab application and E6704A EGPRS lab application for the 8960 Series 10 wireless communications test set

The E6701C and E6704A gives R&D engineers a network emulator with RF measurement capability on their bench, allowing them to quickly troubleshoot and validate GSM, GPRS, and EGPRS wireless appliance designs. The flexible, comprehensive protocol analysis and data channel of the test set provides R&D engineers with the tools needed to accurately evaluate and verify an appliance's signaling functionality, IP performance, and user experience. These enhanced capabilities make the 8960 Series 10 wireless communications test set (E5515C) one of the most advanced instruments available today.

The E6701C powerful and full-featured protocol analysis for more efficient troubleshooting capabilities include:

- real-time logging of inter-layer and peer-to-peer messages including developer's proprietary messages (raw data only)
- selectable and powerful triggering, filtering, and search capabilities of logs
- the traffic overview summarizing logged message information
- decode view for viewing individual bit fields with labeling for each message
- viewing of raw data in either hex, decimal, or binary form

IP data channels

The IP data channel feature allows you to originate and terminate real-time application specific Packet Switched GPRS/EGPRS data traffic or Circuit Switched GSM data traffic. A true IP data channel is supported to provide connectivity between the air interface and the instrument's LAN port.

Application	All lab integration, testing, and verification	Signaling and data channel protocol testing and verification	Manufacturing test
Software and platform	E6701C + E5515C	E6910A + E6900A	E1968A + E5515C
Network emulation	•	(GPRS only)	•
Wireless protocol advisor	•	•	
RF-to-LAN IP data channel	•	•	
RF measurements	•		•
Calibrated RF performance	•		•

A comparison of lab, protocol, and test applications available with proven benefits to help you accelerate your R&D design cycle.

Test infrequent network events

Historically, the testing of infrequent network events can be difficult and time consuming. This lab application now provides the capability to test a number of common but infrequent network events on your bench.

Protocol Event Triggering and Extended Frame Triggers

The new Protocol Event Trigger Output (patent pending) allows protocol-related events on both the uplink and downlink in multiple layers of the protocol stack to provide an externally available trigger for other instruments, such as spectrum analyzers, and logic analyzers.

Additional GSM/GPRS lab application features include:

- PBCCH, including support for 8 and 11 bit PRACH
- Point-to-point and cell broadcast short message service (SMS) for all formats

Additional information is available at www.agilent.com/find/8960support and www.agilent.com/find/wirelessprotocol



www.agilent.com/find/email updates Get the latest information on the products and applications you select.

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

© Agilent Technologies, Inc. 2002
Printed in U.S.A. December 16, 2002
5988-3689EN

