We Simplify Networks.℠

THE SPECTRA PRODUCT LINE | DIAGNOSTICS

Inet *continues*
to deliver
innovative
testing *solutions.*
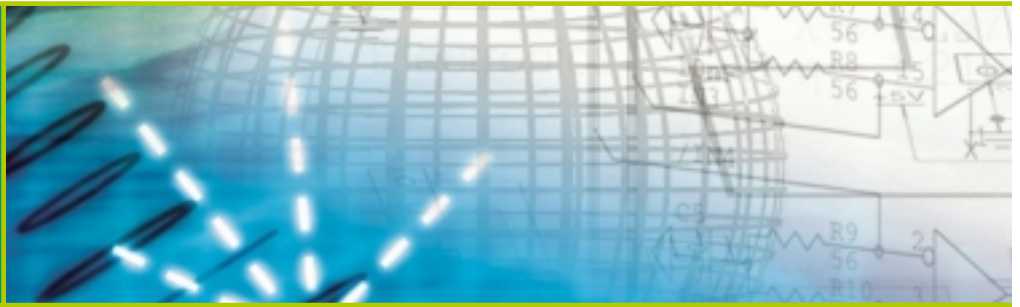
The Spectra™ Product Line—One Box, for all your testing needs.

Inet Technologies provides easy to use diagnostic solutions for the continuing development and optimization of current and next-generation networks on a global scale. Inet's Spectra product line helps the industry's carriers and equipment manufacturers worldwide accelerate development, establish benchmarks, rigorously test interconnectivity issues, improve network reliability and Quality of Service (QoS), and maximize testing and operational efficiency.

Since Inet's inception in 1989, diagnostic products have been at the core of the company. Today, Inet continues to deliver innovative testing solutions, providing tools for such diverse applications as ISDN trunk circuit verification, Signaling Gateway routing validation, H.323 Gatekeeper load testing, SIP application server conformance testing, or simulating the procedures between an MSC and the SGSN. Whether your needs are based on today's networks or the networks of tomorrow, Inet has the solution.

Diagnostic Solutions

Multi-protocol Testing

Put Multi-protocol Testing Capabilities in the Hands of Your Engineers.

Inet's Spectra product line provides testing solutions for signaling and media applications within PSTN, VoIP, and wireless networks. Inet simplifies testing by delivering powerful, easy-to-use tools on an integrated platform that supports the diverse technologies of current and next-generation networks. Targeted to the needs of advanced SS7, ISDN, Sigtran, wireless and VoIP networks and labs, the

Spectra product line brings diverse protocols into a common platform for efficient, integrated monitoring, analysis, and troubleshooting.

Collect statistics, capture messages, or monitor transactions over a variety of interface types. Filter messages on monitored interfaces based on combinations of message parameters. Emulate a node or an entire network.

Troubleshoot and analyze data while testing, emulating, or generating traffic simultaneously across a variety of protocols and

Test SS7, ISDN, Sigtran, Wireless, and VoIP protocols, all from a single, integrated diagnostic platform.

interfaces. No matter what protocols power your network, the Spectra product line provides solutions for testing, analysis, and generation.

Network Reliability

Verify Capacity and Improve Network Reliability.

Stress signaling and media infrastructure from a single system with traffic generation. Inet's Spectra product line loads and stresses signaling and media paths simultaneously to confirm equipment and network capacity. Evaluate and benchmark the capabilities of your network and equipment under test with performance statistics.

Customize network configurations with an array of next-generation network elements to simulate true network conditions, such as delay, packet loss, and jitter. Simulate consumer behavior and stress critical wireless revenue-generating roaming applications in GSM or CDMA networks. Integrated statistics provide real-time performance analysis during test cycles. Standardized conformance test scripts ensure equipment interoperability and accelerate regression test cycles.

WE SIMPLIFY NETWORKS℠   Inet®

Accelerate Development

## Accelerate Development and Deployment, and Decrease Time-to-Market.

With network and application testing from a single box, the Spectra product line enables you to accelerate your network and service development. Conformance, Validation, and Regression test suites ensure network compliance with global signaling standards. With domestic and international interface and protocol support, the Spectra product line readies you for quick and secure service deployment anywhere in the global marketplace.

Simplify Testing to Maximize Operational Efficiency.

The flexible scripting language, which allows selection from predefined test cases or custom built scenarios, enables test cases to be written quickly.

API and reporting tools allow test case automation and support interfacing with a test case manager. Detailed call-based statistics, including successful and failed call attempts, can also be exported to database applications for itemized report creation.

In addition to automating workflow and simplifying testing procedures, you can optimize lab space and realize significant cost savings by simultaneously sharing the same platform among multiple users.
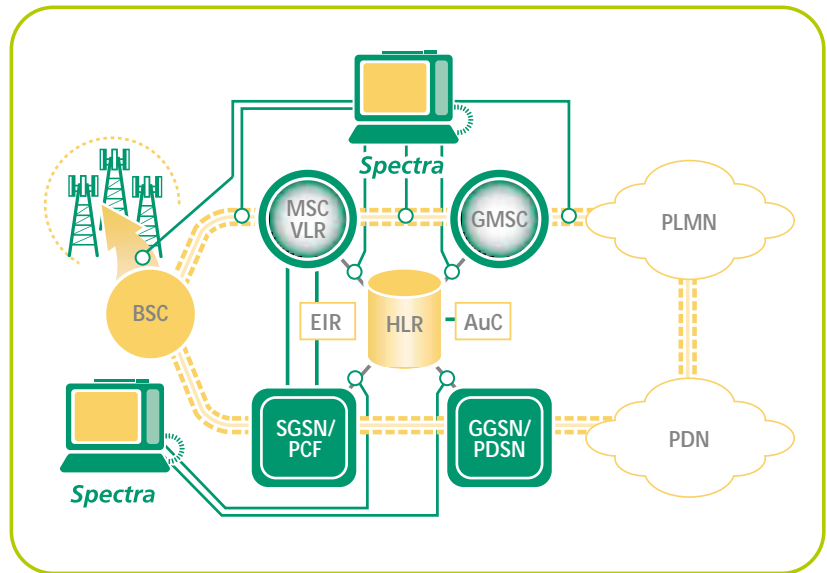
VoIP Application Testing
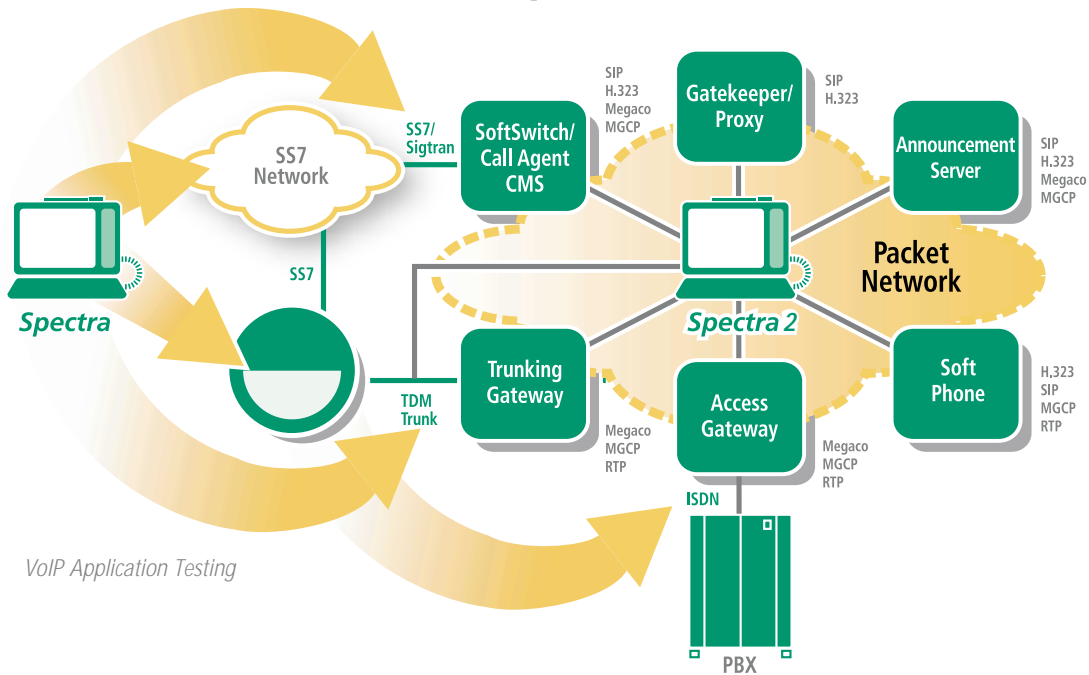
Protect Your Investment with Flexible, Scalable Technology.

Inet's Spectra product line provides integrated solutions on a common, high-performance platform. Interface cards can be easily shared across diverse protocols and support TDM, IP, and ATM. This single platform solution is all you need to support future signaling and voice quality testing. With the simple addition of software packages that utilize the same versatile hardware, you can scale both the capacity and capabilities of Spectra to directly align with your testing require-ments. Whether you need to test ISDN access, a next-generation STP, or an ISUP call agent; whether you need to test a SIP Proxy, an H.323 Gatekeeper, or a Media Gateway; whether you need to test an MSC, an HLR, or an SGSN, Inet's Spectra product line extends to meet your specific needs.

Wireless Application Testing

Validate Voice Quality and Improve QoS.

Carriers must ensure today's quality in tomorrow's networks. Inet's Spectra product line provides quantitative voice quality testing and PESQ analysis, coupled with detailed performance statistics. Validate media paths traveling exclusively over IP, as well as media paths traversing TDM and IP networks. Media-encoding schemes G.711, G.729A, and

G.723.1 are fully supported. Inet's Spectra product line provides tone and .WAV file injection and detection capabilities with RTP stream capture and manipulation.

Quantitative voice quality test-ing and PESQ analysis, with detailed performance statistics.

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Features and Specifications

Rackmount >>

Portable >>

Platform Specifics	Rackmount	Portable
Slots	16 PCI	6 PCI
Dimensions	43.26W X 46D X 26.5H cm, 17W X 18D X 10.5H in	41W X 25D X 27H cm, 16.1W X 9.8D X 10.6H in
Weight	22.7 kg, 50.5lb	9.5 kg, 21 lb
Operating System	WindowsXP	WindowsXP
Monitor	Optional	Flat Panel 35.8 cm (14.1 in) XGA TFT
Power	110-220 VAC, -48 VDC Optional	110-220 VAC

Interfaces
- *DS1/E1/J1*
- *M20*
- *DS3*
- *BRI S/T*
- *DSO-A*
- *V.35*
- *CII*
- *RS-449*
- *10/100 Base T Ethernet*

System Features
- *Protocol Analysis and Monitoring*
- *Protocol Testing (includes Conformance Test Suites)*
- *Bulk Call Generation*
- *Call Trace*
- *Node Emulation*
- *Terminal Emulation*
- *Network Emulation*
- *Media Testing*
- *PESQ Voice Quality Testing (ITU-T P.862)*

- *Link Manipulation Tools*
- *Pre-capture Filter, View, and Trace*
- *Post-capture Filter, View, and Trace*

Statistics and Test Results
- *Complete Level 1 and Level 2 Performance Statistics*
- *Comprehensive Call-based Performance Statistics*
- *ISUP/TUP Generator Results*
- *ISDN Generator Results*
- *TCAP Generator Results*
- *GSM Generator Results*
- *H.323 Generator Results*
- *SIP Generator Results*
- *Megaco Generator Results*
- *MGCP Generator Results*
- *RTP Performance Statistics*
- *Voice Quality Statistics (PESQ & MOS)*

Protocols
- *SS7 (ANSI, ETSI, ITU, Japan, China)*
- *SS7-over-ATM*
- *Unchannelized SS7 (HDLC)*
- *Sigtran*

- *ISDN (ITU-T, ETSI, ABIS, V5.1, V5.2, DASS, DPNSS)*
- *ISUP/TUP (12 international variants)*
- *GSM (GSM MAP 3, UMTS MAP 4)*
- *IS-41 (includes IS-826, IS-771)*
- *CAMEL (Phase 3)*
- *INAP/AIN (20 variants)*
- *H.323 (v2, v3, v4)*
- *SIP*
- *Megaco/H.248 (Text and Binary)*
- *MGCP (includes NCS/TGCP)*
- *RTP*

Media-Encoding Schemes
- *G.711 (μ-law/A-law)*
- *G.729A*
- *G.723.1*

Other Features
- *Remote Access*
- *Intuitive User Interface*
- *High-Density Interface Support*
- *Message Editor*
- *Audio Controller*
- *Tone Generator*

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