Network Diagnostics

▶ Spectra

Spectra set the industry standard as an easy-to-use tool for performing sophisticated SS7-based signaling testing. Enhancement requests from our customers drive Spectra's design and feature evolution. This has helped make us the market leader in SS7 test solutions.

Spectra provides integrated Monitoring, Testing and Generation features for PSTN technologies. Users can perform deep protocol analysis, standards-based conformance testing, network element emulation and load generation from one integrated tool.

Monitor – Capture and analyze link data, perform real-time and post-capture call trace. View data based on specific criteria such as phone numbers, error messages and link status. Collect data from specialized tests that you create. Capture and decode SS7 PDUs from MTP2 to the ISUP and TCAP layers with full parameter display.

Test – Create any desired test scenario using Spectra's menu-driven test-building capability. Choose from more than 2,400 pre-scripted conformance test cases or use Spectra's "Ping-Pong" editor to create your own test cases. Run and observe tests in real time. Spectra also lets you get a detailed look at parameter values. View post-capture test results. Save and recall test files, batch test files together and perform call tracing.

Generate – Stress test network elements with Spectra's load generation capabilities for TCAP, ISUP, TUP, GSM, ISDN and MTP3. Flexible traffic modeling lets users create multiple call scenarios such as steady ramping traffic and mass call spikes. Create and modify number databases for use by Spectra system generators. Spectra supports more than 150 PSTN protocols, including country-specific variants and equipment manufacturer implementations. Spectra's modular architecture lets you easily add software and hardware options. Spectra's integrated hardware and software solution addresses:

Conformance Testing – With over 2,400 defined conformance test cases, Spectra is the industry-leading product for SS7-based conformance testing.

Protocol Support – For more than 150 PSTN-based protocols. Spectra's modular design lets you add multiple protocol support as needed.

High-Speed Links – Test SS7/ATM, SS7/Unchannelized HDLC, M3UA, M2PA and SUA from a single test tool.

Sigtran – Assess the performance of Signaling Gateways (SGs) and next-generation STPs.

Wireless Testing – Test the core network WIN and IN features of CDMA, GSM, GPRS and UMTS networks. Easily monitor MAP and A-interface transactions.

Tektronix

Enabling Innovation

▸ Characteristics

▸ General Characteristics

	Portable Chassis	Rackmount Chassis
Slots	6 PCI	16 PCI
Operating System	Windows XP	
Monitor	Flat Panel 35.8 cm (14.1 in.) XGA TFT	Optional
Power	110 to 220 VAC	110 to 220 VAC 48 VDC Available

▸ Physical Characteristics

Dimensions	Portable Chassis		Rackmount Chassis	
	cm	in.	cm	in.
Height	27	10.6	26.5	10.5
Width	41	16.1	43.26	17
Depth	25	9.8	46	18
Weight	kg	lb.	kg	lb.
Net	9.5	21	22.7	50.5

Spectra Packages

▶ SS7 Monitor

▶ SS7 Monitor/Tester

▶ ISDN Monitor

▶ ISDN Monitor/Tester

▶ SS7 and ISDN Monitor

Spectra Applications

▶ SCTP Tester
  M2PA and M2UA

▶ SUA Tester

▶ High-speed Link (HSL)

▶ SAAL/ATM Tester

▶ ISDN Generator

▶ GSM Generator

▶ TCAP Generator

▶ Trunk Tester

▶ SS7 Conformance Testing
  Conformance, Validation and Regression
  Testing (CVR)
    Level 2, ITU-T Q.781
    Level 3, ITU-T Q.782
    TUP, ITU-T Q.783
    ISUP, ITU-T Q.784
    TCAP, ITU-T Q.787

▶ Network Element Emulation

▶ SSP, STP, SCP, SG, AS/ASP

Protocol Support

▶ SS7

▶ SS7 over ATM

▶ Unchannelized SS7 (HDLC)

▶ ISDN

▶ GSM

▶ GSM/CAMEL/BSSA

▶ TCAP

▶ ANSI

▶ ITU-T

▶ China

▶ Ericcson INAP/INCS1+

▶ ETSI INAP

Media and Signaling Interfaces

▶ DS1/E1 V5 Bantam

▶ DS1/E1 V6 BNC

▶ HSL DS1/E1

▶ BRI S/T V2

▶ J1

▶ DSO

▶ V.35

▶ RS449

▶ RS232

▶ Ordering Information

Have a Diagnostics Representative Contact Me.

Network Diagnostics
▶ Spectra

Our most up-to-date product information is available at:
www.tektronix.com

Product(s) are manufactured
in ISO registered facilities.

CE   ISO 9001

10/05   HB/WOW   5TW-18207-1

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