- New MPEG-2 video real-time analysis, UNI and NNI signalling, LAN emulation test solutions
- Widest range of line interfaces and test software available
- Can be remotely accessed and shared over a LAN
- Includes C language user-programming environment
- Substantial savings on popular bundled configurations

The Complete Broadband/ATM Test Tool Kit

The Hewlett-Packard Broadband Series Test System (BSTS) is the industry standard for ATM, B-ISDN, and LAN/WAN protocol testing. The fully-programmable BSTS is ideal for R&D engineering, product development, quality assurance, performance, type approval, and conformance testing. It can perform comprehensive testing of all layers, from physical through higher services, and at speeds from 1.5 up to 622 Mb/s. Typical applications include transmission and network interface testing, ATM transport characterization, broadband protocol development, broadband protocol verification, and conformance testing.

Major Applications and Supporting BSTS Test Modules

Signalling
E4214A UNI Signalling Test Software
E4217A NNI B-ISUP Signalling Test Software
E6273A ILMI Protocol Viewer Test Software
E7823A UNI 3.0 Signalling Conformance
E7833-E7834 UNI 3.1 Signalling Conformance

LAN Internetworking
E6272B LAN Emulation Test Software
E4215B LAN Protocols Test Software
E7293A ATM Forum LAN Emulation

WAN Internetworking
E4206A T1/E1 Frame Processor
E4207A V-Interface Frame Processor
E4216A Frame Relay Test Software
E6275A FUNI Test Software
E4211A SMDS Test Software
E4213A SMDS DXI Test Software
E7290A SMDS/CBDS Service Over ATM Interworking

Digital Video
E4226A MPEG-2 Protocol Viewer Test Software
E6271A MPEGscope ATM Test Software
E4219A ATM Network Impairment Emulator

Network and Equipment Characterization
E4212A AAL Test Software
E4223A Policing and Traffic Characterization Test
E4219A ATM Network Impairment Emulator
E1696A Optical (SONET/SDH) Load Generator

Conformance Testing
E5581A ATM Layer EU
E7820A-E7822A UNI 3.0 Conformance
E7823A UNI 3.0 Signalling
E7830A-E7832A UNI 3.1 Conformance
E7833/E7834 UNI 3.1 Signalling
E7293A ATM Forum LAN Emulation
E7290A SMDS/CBDS Service Over ATM Interworking

Modular Tester Tracks Emerging Technology

Since the BSTS is a modular system, you can start with a basic cost-effective configuration and add test software, line interfaces, and specialized test modules as required. The BSTS is a scalable solution that lets you leverage your investment to track standards, rather than replacing a less powerful tester each time that ATM technology changes.

High-Level Testing with the Cell Protocol Processor

Line interfaces can perform physical layer testing, but the E4209B Cell Protocol Processor carries out ATM, AAL and other high-layer testing. The Cell Protocol Processor includes an automatic segmentation and reassembly engine that processes cells in real time at full line speed.

Signalling Emulation for UNI and NNI Signalling

Equipment manufacturers and network providers implementing switched virtual circuits can provide robust products by using the E4214A UNI and E4217A NNI B-ISUP signalling test software. HP's open implementations of reference emulation state machines can be configured to offer an extremely wide range of test scenarios.

ATM Conformance and Interoperability Testing

A wide range of conformance and interoperability test suite software applications turn your BSTS into an automated regression test tool, with complete support for the ATM Forum 3.0 and 3.1 UNI cell layer and signalling protocols, as well as LAN emulation.

Real-Time MPEG Digital Video Analysis

The new E6271A MPEGscope ATM test software, in conjunction with the ATM Network Impairment Emulator, provides a complete MPEG video transmission tester that allows you to verify protocol implementations and characterize video network performance requirements by directly controlling quality of services parameters. Efficient real-time operation eliminates the need for post-processing captured traffic.

Frame Relay Internetworking Testing

The new E4206A T1/E1 and E4207A V-Interface Frame Processors are dedicated high-performance monitoring/traffic generation modules which provide testing capability for the Frame Relay side of ATM/FR internetworking applications. Other BSTS modules can simultaneously test the ATM side. Generate normal or abnormal frame relay traffic, capture and replay actual traffic, or define your own sequences of protocol data units. Includes LMI emulation.

Graphical User Interface Makes Complex Testing Easy

The embedded UNIX® controller executes test software and provides an X/Motif graphical user interface. Even complex tasks, such as building a sequence of protocol data units, are as easy as pointing and clicking the mouse. Workstations running X-Windows can be used to control the BSTS through Ethernet.

Two Models for Laboratory and Mobile Use

The BSTS is offered in two different form factors: the E4210B Form-13 is a rack-mounted chassis designed for laboratory use while the E4200B Form-7 is a transportable chassis designed for mobile and field trial use. Both chassis contain an embedded high-speed PA-RISC workstation running the HP-UX 9.0 operating system with full C-programming capability.

For More Information

Contact your local HP sales office and request the Broadband Series Test System Product Catalog, publication number 5965-4721E.

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SONET/SDH Line Interface Modules	
E1697A	155 Mb/s (STS-3c/STM-1) Optical
E4203A	155 Mb/s Protocol
E4205A	155 Mb/s (UTP-5)
E1617A	52 Mb/s (STS-1/STM-0) Optical
E4200B/E4210B #004	622 Mb/s (STS-12c/STM-4) Optical
PDH Line Interface Modules	
E1616A	1.5/45 Mb/s (DS1/DS3)
E1695A	45 Mb/s (DS3)
E1610A	34 Mb/s (E3)
E1613A	6.3 Mb/s (J2) Electrical
E1614A	6.3 Mb/s (J2) Optical
E4201A	2.048 Mb/s (E1)
Oher Line Interface Modules	
E1619A	25.6 Mb/s (4B/5B)
E1698A	100-140 Mb/s (TAXI 4B/5B)
E4204A	HSSI