



# DSLPipe-HST

The DSLPipe™-HST is a frame relay-over-symmetric digital subscriber line (SDSL) router/bridge that uses existing single-pair copper wiring to accelerate applications such as Internet access, Web-based research, videoconferencing, voice-over-IP (VoIP), ecommerce, multimedia, Web hosting, and more. Based on Lucent's award-winning Pipeline® technology, this full-featured, frame-based router delivers all the capabilities needed for high-quality, high-speed, and high-bandwidth remote network connections.



## High-speed, high-bandwidth SDSL connectivity

The DSLPipe-HST unit provides a versatile, cost-effective solution for enterprise and home office settings. This router/bridge sends and receives data at speeds up to 2.3 Mbps making it ideal for a wide range of high-bandwidth applications. With a DSLPipe-HST unit, users can send files, browse the Web, upload graphics, or simply read email. And this unit features rate-adaptive SDSL, which automatically sets the highest possible data rate based on line quality. This capability frees carriers from the task of manually setting data rates for users during installation.

## Compact unit with wider geographic range

This router/bridge packs the latest SDSL technology into a compact unit that fits easily on any desktop. Each unit accommodates a wider geographic range with up to 16,500 feet of twisted-pair wiring between itself and xDSL central office equipment (COE), such as the Lucent DSLTNT™ and DSLMAX™ 20 access concentrator. With a full 10,000 feet more than conventional SDSL, these units let Internet service providers (ISPs) and carriers expand their user reach.

## Multiprotocol support

DSLPipe-HST units provide flexibility and investment protection for carriers as well as subscribers with support for frame relay, point-to-point protocol (PPP), IPX, AppleTalk\* and TCP/IP.

## Concurrent routing and bridging

The DSLPipe has the ability to bridge other protocols (such as IPX) while routing TCP/IP. By combining routing and bridging functions in one unit, DSLPipe-HST devices provide one configurable solution for accessing the Internet and any LAN. Each router/bridge unit supports a 10Base-T Ethernet interface that allows for efficient connections to individual computers or multiple computers for local area networking.

## Network Address Translation

The Network Address Translation (NAT) capability assigns a transparent network address to each DSLPipe-HST device. This enables users to access the Internet with unregistered network IP addresses for the duration of a session. And NAT eliminates the cost and complexity of obtaining and owning dedicated IP addresses.

## Automatic configuration with TURN-UP™

These units support TURN-UP, an installation utility that enables timesaving configuration. TURN-UP automatically provides each DSLPipe-HST unit with configuration information through any router or bridge that can terminate a VC or PPP connection on an ISP's network. With TURN-UP, users can get their DSLPipe-HST units up and running with minimal time and effort. TURN-UP also eliminates the need for service provider truck rolls and provides a mechanism to centrally manage user configurations.



### On-board intelligence with TAOS

The DSLPipe-HST builds on the technology of Lucent's Pipeline products. These units are based on Lucent's True Access' Operating System (TAOS) that is at work in thousands of Lucent access concentrators, routers, and switches all over the world. TAOS provides expansive management and control capabilities and enables functions such as modem initialization, SNMP agent participation, and statistics gathering.

### Centralized network management

With embedded simple network management protocol (SNMP), DSLPipe-HST units support streamlined monitoring, management, and configuration through various applications such as the NavisAccess™ platform. NavisAccess provides a suite of applications for centralized monitoring and control of Lucent multiservice products, including DSLPipe-HST units. Operating from a single platform, these applications present a complete view of the network from the "big

picture" to performance details for an individual port. NavisAccess offers a cost-effective solution for streamlined network management and quick deployment of new services.

### Comprehensive security for remote networking

DSLPipe-HST units perform extensive security and authentication procedures to provide secure access and transmission for remote networking. These procedures include:

- User authentication with authentication profiles: Password Authentication Protocol (PAP) and Challenge Handshake Authentication Protocol (CHAP)
- Token-based security with support for multiple vendors' products
- Transmit and receive packet filtering
- Integrated SecureConnect™ firewall
- Telnet/SNMP management

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### Hardware Specifications

#### Dimensions

8.3 in x 6.19 in x 1.25 in (14.2 cm by 27 cm x 3.2 cm)

#### Weight

2.25 lbs (1.13 kg)

#### WAN Interface

One SDSL interface (RJ-11 jack)

#### LAN Interface

4-port Ethernet hub, 10Base-T (twisted-pair RJ-45 jack)

#### Transmission rate vs. distance

2.3 Mbps @ 12,000 ft (24 gauge) or 9000 ft (26 gauge)

1.54 Mbps @ 15,000 ft (24 gauge) or 12,000 ft (26 gauge)

384 Kbps @ 21,000 ft (24 gauge) or 16,500 ft (26 gauge)

#### Operating Environment

Temperature: 40°F – 105°F (5°C – 40°C)

Humidity: 20% – 80% noncondensing

#### Power Requirements

AC Voltage: 100 – 120 VAC; 200 – 240 VAC

Frequency: 60/50 Hz

Power Consumption: 15 W maximum

#### Safety Compliance

IUL 1950, CSA 22, EN60950

EMC/RFI Compliance

FCC Part 15 Class B, EN

55022/CISPR 22 Class B, ENS0082-

### Software Specifications

#### Protocols Supported

TCP/IP with RIP1-compatible, RIP2, IPX, Appletalk routing, standard bridging of all protocols, NAT, DHCP, Frame Relay

#### Security

PAP, CHAP, Telnet password, token-based security, packet filtering, Integrated dynamic SecureConnect Firewall, SNMP port management

#### Management

SNMP, Telnet, syslog, Lucent remote management protocol, direct serial cable connection (DB-9)

*Pipeline is a registered trademark; DSLPipe, DSLTNT, DSLMAX, Multilink Protocol Plus, NavisAccess, and SecureConnect are trademarks of Lucent Technologies Inc.*

*\*Appletalk is a trademark of Apple Computer, Inc.*

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