



Total Access 544R

SHDSL Router

Product Features

- Full featured bridge/router incorporating a SHDSL WAN interface
- Supports symmetrical data rates from 200 kbps to 2.312 Mbps with a range of up to 20,000 feet
- Supports Multiprotocol Encapsulation over ATM and PPPoA
- 10/100 BaseT Ethernet Interface
- NAT/PAT allows multiple users to share one DSL line and share a single IP address
- Built-in 90-240VAC 50/60Hz Autoranging AC power supply
- Remote configuration
- Software is Flash-upgradable via TFTP or Xmodem

The Total Access[®] 544R is a cost-effective SHDSL router targeted for small and branch offices. Capable of symmetrical data rates up to 2.304 Mbps, the Total Access 544R provides ample bandwidth for most small offices and branch offices with fast, affordable, and easy-to-use access to the Internet and corporate network. This device provides access to high-speed networks over an SHDSL network interface. By using low-cost DSL services instead of traditional leased lines or Frame Relay, customers can save on monthly costs, quickly leading to substantial annual savings.

SHDSL is the newest DSL technology targeted at the small- to medium-sized business market. SHDSL allows service providers worldwide to deploy the technology, which combines the spectral, reach, and interoperability benefits of ANSI HDSL2 and ETSI SDSL. SHDSL delivers symmetric data rates up to 2.3 Mbps over a single copper pair at up to 30 percent greater distances and at 35 to 45 percent higher data rates than 2B1Q-based SDSL, and is rate-adaptive. Its TC-PAM modulation technique ensures spectral compatibility with other DSLs deployed in the same binder group.

With the Total Access 544R, carriers can offer enterprise customers the ability to provide multiple users network access over a single SHDSL interface. For simultaneous

access to the corporate network and the Internet, the Total Access 544R offers multiple PVC configurations. In addition, the Total Access 544R provides NAT/PAT, functionally providing security from unauthorized access to the users network and allowing a single IP address to be shared among multiple users. Teaming the NetVanta[™] 2100 with the Total Access 544R provides additional firewall protection and VPN capability.

The Total Access 544R also provides a cost-effective campus connectivity solution. When used with private dry copper, the Total Access 544R delivers 2.304 Mbps bi-directionally over a single twisted pair of copper. The Total Access 544R can also transmit at subrates ranging from 192 Kbps to 2.304 Mbps. This solution can be used to extend a LAN or provide remote access to single user or LAN segment.

The Total Access 544R provides for simple network management. The Total Access 544R offers both a DHCP server and client, allowing both the WAN interface and the devices on the LAN to obtain IP addresses automatically. Additional network management features include built-in Telnet, ping and trace route utilities to allow troubleshooting of network problems. The Total Access 544R also provides SNMP for stats and alarms.



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SHDSL Router

Product Specifications

WAN Network Interface

- SHDSL
- **Line Rate:** 200 kbps to 2.312 Mbps
- **Line Code:** TC-PAM
- **Line Interface:** RJ-45
- ITU-T G.991.2 (Annex A and Annex B)
- **Rate Adaptation:** G.handshake – G.hs (ITU-T G.994.1)

LAN Network Interface

- **Ethernet:** 10/100 BaseT
- **Line Interface:** RJ-45

Routing Protocols

- TCP
- RIPv1 and RIPv2
- UDP, ICMP, ARP, UDP Relay, IPCP, SYSLOG

ATM

- Support for up to six virtual circuits
- RFC 1483 - Multiprotocol Encapsulation over ATM AAL5
- RFC 1577 – Classical IP over ATM
- RFC 2364 – PPP over ATM

PPP

- LCP, IPCP, BCP, CCP

Address Management

- DHCP (Server)
- RFC 1631 – NAT (One-to-One and Many-to-Many)
- PAT (One-to-Many)
- IEEE 802.1D MAC Bridging and Filtering Capabilities
- Packet Filtering (Pattern I, Bridge)

Configuration

- RS-232 Craft Interface (DB-9)
- Telnet
- Software is Flash upgradeable via TFTP or Xmodem

Environment

- **Operating Temperature:** 0° to 50°C, (32° to 122°F)
- **Storage Temperature:** -20° to 70°C, (-4° to 158°F)
- **Relative Humidity:** Up to 95%, non-condensing

Physical

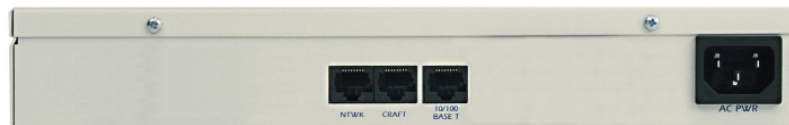
- **Dimensions:** 3.81cm H x 15.88cm D x 22.86cm W
- **Weight:** 0.91kg
- **Power:** 90 to 240 VAC, 50 to 60Hz
- **Agency Approvals:** EN55022, EN50082-1, En60950, CE Mark, ETSI 300

Product Includes

- Total Access 544R
- AC power cord
- 6' RJ-45 to RJ-11 WAN cable
- RJ-45 to DB9 Craft interface adapter

Ordering Information

Equipment	Part #
Total Access 544R (Euro Power Cord)	4200704L8
Total Access 544R (UK Power Cord)	4200704L9



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