**NETLINK™ ACCESS PRODUCTS**

*Get any-to-any connectivity with the Model 3086 ipRocketLink, and offer 2-wire standards-based transmission with Sync-Serial, WAN, and Ethernet/IP for fast, dedicated, always-on access.*

# G.SHDSL Integrated Access Device

## Patton Model 3086 ipRocketLink IAD

The Patton Model 3086 ipRocketLink IAD redefines access and sets the new standard for customer premise equipment. Based on European Telecommunications Standardization Institute (ETSI) and International Telecommunications Union (ITU) G.SHDSL G.991.2 standard, the Patton 3086 ipRocketLink enables 2.3/4.6 Mbps speeds at nx64 (n=1..36/72) over a single pair of wires while combining standards-based transmission with Synchronous-Serial, Ethernet, and high speed IP routing…all in one compact package.

With Patton's FlexIP™ architecture, the Model 3086 offers V.35/X.21 Sync-Serial interfaces *and* 10/100 Ethernet ports. The sync-serial port is user configurable for V.35 or X.21. Integrated software selectable DCE/DTE support eliminates messy crossover cables. The Ethernet port enables access to any IP network via ATM, PPP, or Frame Relay. Both interfaces can be simultaneously selected with user-defined bandwidth for each port.

The 3086 boasts easy installation with DIP switch, Telnet, and WWW/SNMP management. It provides bridging and routing functionality, along with advanced IP features like NAT and Firewall, and optional IPSec-based VPN. As part of Patton's family of ipDSL products, the Model 3086 offers a complete, managed, end-to-end system when used with Patton's central site access concentrators.

For more information, visit us at www.patton.com.

### nx64 Speeds to 2.3/4.6 Mbps

*User-selectable data rates for Sync-Serial, WAN, or Ethernet/IP ports. Use as a standalone or with the ForeFront Access system*

### User-Selectable DCE/DTE V.35/X.21

*Get both interfaces at the same time. Software selectable with DCE/DTE support without messy crossover cables*

### Built-in Ethernet/IP Router Standard

*With Patton's FlexIP architecture, split the bandwidth and use both interfaces at the same time*

### Get ATM, PPP, and Frame Relay

*Versatile interface options allow for simple deployment into any network environment*

### Interoperable with Third-Party DSLAMs

*Take advantage of Patton reliability whether you connect back-to-back or to a third-party DSLAM.*

### LEDs and Full V.52/V.54 Diagnostics

*Easy-to-access toggle switches let you test the link with built-in test modes. LEDs provide clear status at-a-glance*

### WWW/SNMP Manageable

*Built-in VT-100 console port makes setup a snap, and you can use the embedded HTTP/SNMP agent to manage the Model 3086 from anywhere in the world.*


Model 3086 ipRocketLink IAD

- Internal universal (90–260) AC power
- 12 LEDs show status at-a-glance
- Configure with console, Web, Telnet, or DIP-switches
- Built-in Ethernet crossover for easy connections
- Dual serial and Ethernet interfaces can be used simultaneously

## Why use our Model 3086?

The Patton Model 3086 ipRocketLink IAD delivers all the advanced features for secure, reliable, and high speed data connections. By combining sync serial access with Ethernet/IP, the 3086 IAD makes next-generation connectivity simple, easy, and cost effective.

Available with all standard WAN Sync-Serial interface such as V.35, X.21, T1, E1, G.703/64k, the 3086 is a potent NTU for any network connection. In addition, the Model 3086 offers a standard 10/100 full-duplex Ethernet/IP interface with capabilities ready for any routing task. NAT, DHCP, Firewall, and Filtering give you complete control over network sevices and security. For ultimate flexibility the 3096 combines both intfaces allowing for both Sync Serial and Ethernet ports to be used at the same time.

The 3086 IAD can be used back-to-back or with the Patton ForeFront Access Infrastructure System. Additionally, the 3086 IAD can be used with any other G.SHDSL TDM or Packet system.

### 3086 Competitive Positioning

| | | Patton 3086 | Cisco 828 | ZyXel 782 |
|---|---|---|---|---|
| Connectivity | Line Type | **G.SHDSL** | G.SHDSL | G.SHDSL |
| | ATM Encapsulation | **YES** | Yes | YES |
| | Native PPP/Frame Relay | **YES** | NO | NO |
| | Bridging/PPPoE/IPoATM | **YES** | Yes | Yes |
| | NAT/MultiNAT/DHCP | **YES** | Yes | Yes |
| | Statefull Firewall/ACL | **YES** | Yes | Yes |
| | V.35/X.21/T1/E1 | **YES** | NO | NO |
| Ease of Use | Status LEDS | **12** | 10 | 6 |
| | ENET Cross-Over Switch | **YES** | Yes | NO |
| | 10/100 Ethernet | **YES** | NO | Yes |
| | Built-In Web Mgmt | **YES** | NO | NO |
| | Tech Support | **FREE** | $$$ | included |
| | Software Upgrades | **FREE** | $$$ | included |
| | Compact Unit | **Compact** | Large | Large |
| | Best Value | **YES** | $$$ | $$$ |

## Specifications

| | |
|---|---|
| **DSL** | G.991.2 ITU G.SHDSL Annex A and Annex B, G.994.1 G.hs. nx64 data rates over 2-wire full-duplex to 2.3 Mbps, symmetrical, TC-PAM encoding. Distance of 32,000 ft (9.8 km) at 192 kbps to 18,000 ft (5.6 km) at 2.312 Mbps. |
| **DSL Connection** | Shielded RJ-11F isolation per IEC 950 |
| **Ethernet Connection** | 10/100Base-T, auto-sensing, full/half-duplex operation, built-in MDI-X |
| **Serial Interface** | V.35—M/34F, X.21—DB15F (DCE/DTE), T1—RJ48C, E1—RJ48C, G.703/64k—RJ48C |
| **Management** | EIA-561 RJ-45 RS-232, VT-100 CLI, TELNET, Embedded WEB/HTTP, SNMP, Logging or SMTP on events: POST, POST errors, line/DSL, PPP/DHCP, IP MPOA AAL5 and Bridged encapsulation RFC 2684 and RFC 1577 IPoATM. LLC/VC Mux support. |
| **ATM Support** | UNI 3.0, 3.1, and 4.0 ATM QoS with UBR/CBR/nrt-VBR/rt-VBR and per-VC queuing and shaping.<br>Peak cell rate shaping on a per-VCC basis up to 32 active VCCs<br>I.610 OAM network management including AIS/RDI, loop-back and performance monitoring. |
| **Protocol** | Enhanced ILMI 4.0 for auto-configuration of ATM PVCs, IP (RFC 741), TCP (RFC 793), UDP (RFC 768), ICMP (RFC 950), ARP (RFC 826). IP Router with RIP (RFC 1058), RIPv2 (RFC 2453), OSPF (RFC 2328) Integrated DHCP Server (RFC 2131). Selectable IP leases and MAC/IP pairings. DHCP |
| **Protocol** (continued) | relay agent (RFC 2132/RFC 1542) with 8 address pools. DNS Relay. IGMP v1 and v2. IP-in-IP (RFC-2003) encapsulation, Ethernet Bridging.<br>NAT/NAPT with integrated application support, MultiNat with 1:1 mapping, Many:1, Many:Many mapping, NAT Port/IP redirection and mapping. |
| **Security** | DoS Detection/protection. Intrusion detection, Logging of session, blocking and intrusion events and Real-Time alerts, Password protected system management with a username/password for console and virtual terminal, Packet filtering firewall for controlled access to and from LAN/WAN. Support for 255 rules in 32 filter sets. 16 individual connection profiles. Access list determining up to 5 hosts/networks which are allowed to access management system SNMP/HTTP/TELNET |
| **Indicators** | 12 LEDs: DSL Link; Sync Serial: TD, RD, CTS, DTR; LAN: TX, RX, 100M Link; Status: NS, ER, TM. |
| **Power Supply** | Internal universal 90–260 VAC input or 48 VDC input. Optional external power availale. |
| **Compliance** | FCC Part 15A, CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC, EN60950, EN55022 (CISPR 22) |
| **Environment** | Temperature: 32–122°F (0–50°C); Humidity: 5–90%, non-condensing |
| **Dimensions** | 7.3" x 6.6" x 1.62" (185mm x 168mm x 41mm). |

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